

GAZETTEER OF THE ATTOCK DISTRICT, PART B.—STATISTICS, 1907.

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PUNJAB

DISTRICT GAZETTEERS,

VOLUME XXIX B.

ATTOCK DISTRICT,

STATISTICAL TABLES.

1907.

COMPILED AND PUBLISHED UNDER THE AUTHORITY OF THE PUNJAB GOVERNMENT.



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		1905.06.		133	460,897 913,760	21012	6,00,304			99,471		7,092		171		518	360		2.417	426,906		97.69.3	100'12		166,000 170 170		В.
		1900-01.		13	371,804 726,974		4,30,594		11.00	60,174	263,732	5,140	: :	:	İ	483	643		- 	:	 	23.304		:	::	:	
		1898-99.		Ħ	353,454 718,884 30,793		4,80,580	1	63 174		263,732	9,1,45	:	:	 -	:	:		:	:	9	23,483		- :		:	-
		1898-94.		۱ ۹	358,454 722,463 28,638		4,30,500		72.671		210,851	000:	:	 :		:	:	 	:	:	6	20,976	<u> </u>	:	 : :	:	
		1888-89,		6	349,433 708,270 27,857		4,30,299	<u> </u> -	:	100	5.820 5.820	:	:			:	<u> </u>	1	:		67	13,666	<u> </u> 	-	:		
ones.	.	1883.84.		0	444,076		:		:	-	:	:	<u>`</u>	-		::		<u> </u>	: :	-	27	16,861	:	:	: :		
SUPPLIED BY THE DEPUTY COMMISSIONES.		1878.79.			368,627		:		:		:	: :	:				_		- : :	1	10.70	20,404	- :	:	::	-	
тив Depu		1873-74.	0		368,627.	-			:	:	:	, : :	 :		:	:		:	:	0	11.521		:	:	: :	-	
UPPLIED BY	_	1868-69.	n		368,627	:			:	:	: :	 : :	:		:	:	1	:	:		4,998	+	: :	<u> </u>	:	-	
ic.		1883-64.	47		!!:	:		-	•	:	: :	:		,	:	:	1	:	:	:	_ :	<u> </u> 	-	:	:		
		1858.59.	8		:::	:	Ī	i		: :	:	: :		-			<u> </u>	:	<u> </u> -	:	:	<u> </u> :		:	:		
		1853-54.	20		::	i		:		: :	:				: :	•	 	: :	1	:	 -	:	:	:	-		
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1	District.	- 1		9.33	99.	.12	R. 69.91	1 -				[]	Pab	т В.
-	0061-6691	F						.11-0161	28					
	'66-8681 -	16			17.06	21.14	10-19	ļ						
	1887-98,	16		16.46	17.19	25.48	20-76	'01'806I	27					
	*46·9681	14		15.08	17.40	20.21	15-31	1908-09.	3g					
-	1892-96	E		15.83	32.05	20.36	18-90							
	1894-95.	22	- .	23.75	27.63	28.97	23.03	*80-4061	22					
	'fG-E691	F		22.14	31.12	33.43	21-79	'20'906T	7.5					
	.eg-2681	l A		21.36	26.34	3425	30:31		<u> </u> 		19-07	13.55	18 97	11.83
	1691.92,	0		7.55	11.79	12.55	9.44	1902 9061	83		_			
	16-0691	8	i 	28-43	23.12	26.33	27-62	1604.05	1		20-26	16-77	22.90	14.79
	°06-6981	1/2	1	14.70	12.58	17.13	19.01			<u> </u> 	21.68	22.11	21.80	22.4
	.08-8.48	۰		24.5	7.76	0.80	19.4	**0-2061	12	<u> </u>				7
	*88-498	1 10			¥-6-E	10.01	13.4	902-03	ı R		21.97	15.81	27.87	18.65
	'49-999	<u> </u>		2		5 4	11.5	.20-100	r =		10.10	10.36	11.56	11.48
	.98-588	[]	ì	4-10	200	2 2	18-8	.10-008	L 22		28.32	25.29	40.05	20.14
	verago.	V .	,	00.01	10.01	10.11	18.17		$\frac{1}{1}$	 	-	-	<u>;</u>	:
	ation.	Ť	İ		:	:	;	Station.			:	÷	:	:
	Roingaugo Station.	-	Ţ	4.7	Attock	Pindl Gheb	Fatch Jang Tologous	Raingaugo Station.	1		Attock	Pindighed	Fatch Jang	Tolagang

vi . А тгоск	District.]	12		RAIN	78.32 78.32	t D	T,: ATA	25.20 25.20	ns.	20-70 2-39 16-96	40.05		PAI PAI PAI PAI	20.14 IX
	1809-1900.	10	:	3.18 24. 57.9	0.83	<u> </u>	6.08 5.22	11.66		12.68 -27 7:17	20-12	<u> </u> 	862 6.35 35	15:50
	1808-90.	6		21.32 0.50 4.70	29.92		13.69 / 0.24 / 3.13	17.06		16-44 0-50 4-20	21.14		14.30 .64 4.05	19.19
ı	1897-98.	8		8.84 1.75 5.87	16.46		1022 1.85 5.12	17:19		17-70 2:07 5:71	25.48		.14.25 1 30 5.13	20.46
ARTERS.	1896-97.	4		9:98 0:66 12:20	15.68		8.09 6.86 8.45	17.40		0.05 0.04 0.95	20:51		8-48 0.95 4.88	16.91.
TABLE 5.—SEASONAL RAINFALL AT TAHSIL HEAD-QUARTERS. "Punjab Gazette" Rainfall Statements.	1895-96.	9		11.17	16.83		18·73 0.55 4:77	20.22		16.81 0.23 3.32	20-36		14.19 0.51 4.20	18:00
TAHSIL	1891-95.	6		18.53 0.25 9.97	23.75		19:35 0:98 7:28	27.63		21.40 0:36 7:12	28-97		13-91 0-50 8-62	23.03
NFALL AT	1893-94,	4		10-20 1-48 10-76	22.44		22°10 1'60 7'42	31.12		19.85	33.43	-	14.03 1.15 6.61	21.79
BEASONAL RAINFALL AT TAHSIL HEA "Punjab Gazette" Rainfall Statements.	1892-93,	8		11.63 0.08 9.65	21.36		17-76 1-17 7-41	56.9 2		17.29 2.00 14.96	34.25		21.23 1.23 7.72	12.08
s 6.—SEAS	1891.92.	62		6.93 0.50 1.12	1.56	- 	8.83 0.81	11.79		2.50 2.50 2.50 3.50 3.50 3.50 3.50 3.50 3.50 3.50 3	12.22		7.73 0.22 1.40	8.41
ABLE				:::	:		:::	:		• • •	:		<u> </u>	:
				:::	:		:::	:		:::	:		:::	. :
į				:::	Total		:::	Total		:::	Total'		:::	Total
				:::	_,		:::	Ī		:::	•		:::	
		1	TAUSIL ATTOCK-	Juno to September October to December January to May	_	Tausic Pindi Giren-	Juno to Soptombor October to December January to May		Tausie Faten Jang-	Juno to Soptomber October to December Junuary to May		Taitbie Taeagang	Jano to September October to December Junuary to May	

Аттоог	DISTRICT.]			RAINEA	TT.	D۵	.TA : T/	HSI	ls,					[P.	v art F
	1910.11.	21													
	. 1909.10	20													
! :	1909-09.	10									Ī	İ			
<u>ر</u>	1907-08.	18				j 		<u> </u>	İ	. – – – –					İ
LE 6,—BEASONAL BAINFALL AT TAUSIC HEAD-QUARTERS—CONOLUDED, "Ponjab Gazette" Rainfall Statements—concluded.	1906-07.	17									İ	<u> </u> 		•	
80nal Baineall at Tausld Head-Quarters "Ponjab Gazzte" Rainfall Statements—concluded.	1905-06.	16		80.9 80.0 80.0 80.0 80.0 80.0 80.0 80.0	19.01		27.00 27.00	12.55		8.95 2.47 7.55	18.07		2.4	2.50	11-63
TATEMENTS.	1001-03.	16		8.76 1.54 9.80	20-26		8:33 1:54 6:90	16.77		11:46 1:50 9:94	22.90		44.8	5.16 5.16	14.79
AT TAUSI RAINFALL S	1003-01.	14		6.72 1.04 14.82	21.88		10-02	22.11		8.04 11.86	21.80	,	13-85	808	22.43
GAZKTTE"	1902-03.	13		14.65 0.73 6.59	21.97		11.68 0.35 3.78	15.81	}	20-72 1-27 6-28	27.27		15.81	4.87	18.65
ASONAL R	1901.02,	12		5'06 -38 4'66	10.10		7.98	10.36		8.23	11.56		9.53	1.95	11.48
		Ì		111	:		111	:		; ; ;	:		:	::	:
200				:::	:	•		ŧ	•	:::	:		ŧ	: :	:
146				::;	Total		:::	Total		:::	Total		:	: :	Total
				:::	C.		· : :	-	•	:::	•		:	: :	T
-		1	Tansic Attock-	Jane to September October to December January to May		Tausic Pindi Gueb-	June to September October to December January to May		Tansil, Fater Jang-	Jane to September October to December January to May	1	Tarsin Talagang-	June to September October to December	January to May	

		·				•	at not	d crops	Tar	L POPULA	TION.
					Tatal square miles.	Caltivated square miles.	Square miles culturable but not cultivated.	Square miles under matured crops (10 years' averages).	Total.	Males.	Females.
		1			2	8	4	5	6	7	8
	{	1881	•••		4,201	# 1!	•••		444,307	240,050	204,257
District	{	1891	•••		4,201	•••	•••		448,420	234,475	2 13,945
	Į	1901	•••	, ""	4,201	1,595	40B	997	464,430	242,898	222, 032
	{	Attock	•••	•••	65 1	807	35	238	150,550	. 80,822	70,228
		Pindigheb	111		1,495	438	202	209	100,487	54,849	52,088
Tabsils, 1901	{	Fatch Jang			856	891	62	255	114,849	60,614	54,235
	l	Tallagang	401		1,199	468	109	295	92,594	47,118	45,481

Note.—(1) The District area in calamn 2 was farnished by the Survey Department in 1903, that figures in column 5 are averages for the decade ending 1899-1900. Other figures from Varaacular Census given awing to aheage in District areas.

•							1881.	1891.	1901.
			Per	rons	•••		95'3	95-2	94'8
Percentage of total population which lives	in vil	lages	Ma	les	•••		95*2	94.9	94'8
			Fer	males	***		95'5	80.2	95.0
Average population per village	•11		•••	***	•••		718	706	756
Ditte ditto and town	•••	•••	***	•••	444		748	787	751
Number of villages per 100 square miles	•••	*	•••	•••	 J	•••	14.7	158	15:3

DISTRIBUTION OF POPULATION.

ATTOCK DISTRICT.]
OF POPULATION.

URBAN	N POPT	LATION.	RURA	L POPULA	TION.		TOWNS AND VILLAGES.						
Total.	Males.	Fomales.	Total,	Males.	Fomales.	Over 10,000 souls.	5,000 to 10,000.	3,000 to 5,000.	2,000 to 3,000.	1,000 to 2,000.	500 to 1,000.	Under 500.	Total.
9	10	11	12	13	14	15	16	17	18	19	20	21	22
20,793	11,558	9,235	423,514	228,402	195,022		4	14	10	92	144	321	594
21,671	11,741	9,930	426,749	222,734	201,015		5	11	21	93	152	323	608
24,100	13,156	10,953	440,321	220,2 4 2	211 ,07 9	•••	5	a	ร์	103	158	817	618
15,657	8,036	6,721	134,893	71,366	G 3,5 07		2	1	.0	35	53	94	104
8,452	4,220	4,232	97,988	45,607	47,868	100	2		อ	1!	83	72	135
<i></i>	•••		114,849	60,614	G 1,2 35	•••			6	51	49	124	203
			02,594	47,113	45,481	 	1	1	0	25	23	27	86

in columns 3, 4 and 5 for District and all Tahell areas are taken from the Land Revenue Reports. The Tables I and 111 of 1891 and 1901 and I and XVIII of 1881. (2) Columns 3 to 5 for 1881 and 1891 cannot be

	44.			{ Total par	ulutio	n	1881. 110 [.] 9	1891. 111:9	1001. 115 [.] 9
	(Tolal	•••	•••	{Rural			105.7	108.2	109.8
Density per square mile of			_	(Total	***				201-2
Density por square mile of a	Caltivated .	•••	·	···{ Rural	***				276.1
	Cultivated and			(Total	***	***		•••	231.9
	Cultivated and	l Cui	tatabla		•••			•••	219'9
5V 1 0 -				{Villages	•••		7.4	6.2	8'4
Number of persons per occu	bica nongo .	••	••1	"`{Towns	•••		7.6	63	5.8
Percentage of increase (+)	or decroase (—	-) on	previou	s consus `	•••		***	"	+3.6

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Pottery	***	***	***	•••	411	ib.
Woul	***	***	•••	•••	***	íb.
71.1.	***	***	***	1**	***	155
	***	***	•••	***	110	ib.
Rámpur chádars Shanks	***	•••	***	***	***	ib,
***	•••	100	***	***	***	156
Stockings and gloves	144	•••	***	***	***	ib.
Dreing	***	***	***	111	•••	ib.
Cotion stuffs	***	***	141	•••	***	ib.
Lungis	***	444	***	***	144	ib.
Gabrún	***	411	**	***	***	ib,
Other cotton clo	ths	***	191	***	***	íb.
Cotton prints	***	***	***	***	111	157
Dyeing	•••	***	144	111	***	ib.
Embroidery	***	431	***	111	100	ib.
Ivory	444	***	11+	111	***	ib.
Wood-carving	***	***	211	***	***	158
Silk	***	***		***	'	ib.
Oil-pressing	***	100	•**	111	1.1	ib.
Iron	•••	F10	m,	111	***	ib.
Brass and copper	•••	#13	***	111	101	ib.
Carpontry	***	***	110	***	***	ib.
Other hand manufact	uics	***	***	***	***	ib.
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Effect of European con	mpetition	a on loval ind	vetrice	***	***	ib,
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CHAPTER I-DESCRIPTIVE.

Section A.—Physical Aspects.

Ludhiúna is the most south-eastern of the five districts of the CHAP. I, A. Jullundur Division. Its main portion lies between 30° 33' and 31° 1' North Latitude and 75° 25' and 76° 27' East Longitude. Before the passing of the Riverain Boundaries Act the Sntlej formed the northern boundary of the District, and roughly speaking it may still be so considered. There are however villages to the south of the river which belong to Jullandar, and others to the north of it belonging to Ludhinna. Between Ludhinna and Hoshinrpur the river is still the boundary. To the east the District adjoins Ambala, and to the west Ferozepore, while it is separated from Delhi and Hissár by the territories of Patiála, Jínd, Nábha, and Maler Kotla which ent into it on the south; to the north, east and west its boundaries are fairly symmetrical. The political history of our acquisitions in these parts accounts for the detached villages stretching as far south as 30° 5', while two or three groups of Patiala villages lie within Samrala Tahsil. The compact portion of the District has a length along the Sutlej of nearly 60 miles; while the breadth, north and south, is about 24 miles, except where Patiála territory juts into it between the Ludbiána and Saurála Talisils.

The District is divided into three Tahsils—Samuila to the east, Jagraon to the west, and Ludhiana in the middle. Half way along the northern border of the District and six miles south of the Sutlei is the town of Ludhiana, the head-quarters of the administration. Besides lying on the Grand Trunk Road 191 miles from Delhi and 76 from Ferozepore, Ludhiana is an important junction on the North-Western Railway, from which the Ludhiana-Dhuri-Jakhal and Ludhiana-Ferozopore Railways take off. With the exception of those outlying villages which lie among the Nativo States to the south, no part of the District is more than 30 miles from head-All important places are linked up either by rail or metalled roads so that the communications of the District are the most complete in the Province.

The ontlying or Jangal villages unmber 39, with an area of 125 square miles.

The mean elevation of the District is about 800 feet above sealevel, at Samrila the elevation is 870 feet, at Ludhiina 806 feet and at Jagraion 764 feet. The District has no very striking natural features. The main physical divisions are a low-lying alluvial tract along the river (here called Bet) and the uplands (Dhaia.)

Natural di-

Physical

liet Dháin.

The river Sutlej debouches from the Siwaliks just above Rupar Sutlej. some 20 miles east of the boundary of Samuila Tubsil, it flows the west along the District for some 60 miles, and turns, as it leaves

The liver

Physical Aspects. The river Sutlej.

Jagraon Tahsil, slightly to the north towards its junction with the Beas. When at its lowest, in the middle of the cold weather, the river is very shallow and the main stream seldom exceeds 150 yards in breadth and 3 to 4 feet in depth. Except during the rainy season it is fordable at almost all points but when in flood it spreads two or three miles over the country and even where confined by the Phillaur Bridge Works to its narrowest, measures nearly a mile of running stream. The opening of the Sirhind Canal has, of late years, considerably reduced, except during flood, the volume of water in the river. The Ferries are noticed in Chapter II (page).

Like all Punjab rivers the Sutlej constantly shifts its course during floods. During the last 20 years (1882 to 1903) it has at several points moved about a mile towards the south of its former bed in the Ludhiána and Samrála Tahsils, and about a mile towards the north in the Jagráon Tahsil, near Talwara. According to local tradition it flowed about 120 years ago just under the ridge which separates the Dháin from the Bet. The old towns and villages of Bahlolpur, Máchhiwára, Kum, &c., were built on its banks. The division between uplands and lowlands is everywhere distinctly marked by the ridge or high bank (dha), between which and the present bed of the river lies the Bet. To the east of the District the river and the high bank are five or six miles apart, and this is the width of the Bet for the first 30 miles, but below the town of Ludhiána it gradually narrows until in Jagráen Tahsil it is only one or two miles in width and finally disappears.

The Budba Nála, Immediately under the high bank along the old course of the Sutlej now runs a perennial stream called the Budha Nála which takes its rise near Chamkaur, in the Rupar Tahsil of Ambála, and enters this District under Bahlolpur. Passing just below the town of Ludhiána it flows into the Sutlej in Tahsil Jagráon, a few miles east of the Forozepore border. When swellen by floods in the rains it has a considerable volume of water and covers the surrounding country but ordinarily, although there is in places a good deal of swamp, the stream is only a few yards across. The water, except during floods, is perfectly clear and is used freely for drinking purposes. It is rarely, if ever, used for irrigation. In explanation of this fact it is reported to contain a strong infusion of salts, but the main reason is that it is easier and more economical to dig small unlined wells, in which water is obtained at from 2 to 10 fect below the surface.

To the west the banks of the Budha Nála are high and the land is cultivated right up to the edge. In the cold woather the Budha can be crossed on foot at certain points, but generally the bottom is treacherous, and in the rainy season, even at the fords, the water is too deep for wading. It is spanned by a bridge at Ludhiána on the Jullundur road, and by another at Máchhiwára which was rebuilt in 1900, but at flood time the Bet is almost

entirely cut off from the rest of the District. The floods however CHAP. I. A. being caused only by rainfall in the plains soon subside.

Physical Aspects.
The Dháis

From the high bank the Dhaia or upland plain stretches to the or upland. south unbroken by hill or stream except in the immediate neighbourhood of the high bank, or by a sand ridge. Sand ridges are found everywhere in the Dháia being confined in Samrála Tahsil to two clearly marked belts two or three miles wide which run south-west and may indicate the course of old hill-stream, or drainage lines. Prainage Elsewhere, there are numerous scattered ridges of sand, covering lines, race. considerable areas for short distances, while elsewhere detached patches crop up in a manner quite unaccountable. These ridges are common about Pakhowál in Ludhiána, and in Jagráon Tahsil and especially in the Jangal rising in places to a height of 20 or 30 feet, they quite shut in the view and give the country an undulating appearance. There is a very gentle slope from north-east to south-west, at right angles to the Siwaliks, and the lines of drainage follow this. Near the high bank, the rainfall is absorbed by the light soil; but further inland there are some well defined drainage lines, or raios, which, after heavy rain, carry off a considerable body of water. Some of these raos can be traced from one end of the District to the other, and most of them have been mapped by the Canal Department. They do considerable injury to crops. and often destroy wells in the villages on their course, but this is the whole extent of the mischief, for, even where they are partially impeded by the Grand Trunk Road, the Railway, Canal, &c., there is never anything approaching to swamp.

There are no well-recognized subdivisions of the uplands. The Bet people talk of them as Didia though they sometimes divisions the Dhaia. refer to the Jangal as beyond the Dhaia. The people of the eastern portion speak of the south-west of the District, including our detached villages and part of Jagraon Tahsil with the Patiala and other territories, as the Jangal and as a country where, although the rainfall is scanty, the produce of the unirrigated crops is very fine; where the land is new and there is plenty of it; where, instead of the constant drudgery necessary under a system of high farming, the cultivator has merely to sow his seed and do what he pleases till the harvest. On the other hand the Jat of the Jangal will compare his sandy fields, where only the coarsest grains can grow, with the rich Pawadh, with its sngar, cotton and maize where the produce of a single acre is equal to that of his entire holding. There is then, excluding the narrow sandy strip just over the Bet which is uniform along the whole length of the District, this general distinction between the Pawadh, or eastern tract, and the Jangal or south-western. The characteristics of the former, which comprises the uplands of Samrila and the part of Ludhiana Tahsil, east of the Maler Kotla road, are a generally fertile loam, rather stiff in places, with a high rainfall and ample irrigation, resulting in a highly developed agriculture, all the superior crops being grown.

Minor sub-

Physical Aspects. Minor sub-

CHAP. I, A. West of the road the soil grows much lighter and the rainfall less, while well irrigation becomes difficult, and the higher crops disappear (first sugarcane and then cotton), till finally in our outlying divisions of villages well irrigation is unknown, the spring level being over 100 feet from the surface, and only the hardiest crops being able to subsist on the scanty moisture. There is however an intermediate tract, sometimes called the Tihara, which would include most of Jagraon Tahsil and the country about Pakhowal. The people of Jagraon speak of the whole country south of the Ludhiana-Ferozepore road as the Jangal or Rohe, reserving the name Pháin for the tract between it and the high bank. This is the most correct use of the latter term, which does generally mean the land just over the Dha.

Geology.

There is nothing of geological interest in the District, as it is situated entirely on the alluvium.

Flora: Trees,

In such a highly cultivated District there is not much room for the spontaneous growth of trees or shrubs, but in some Bet villages small plantations of kikar, &c., are reserved by the people. In the uplands, even at the last Settlement, there was little natural growth in the waste lauds; and since then the cultivation has spread over them. In a very few villages in the northern part a small area still remains under dhak (butea frondosa) forests of which must at one time have covered the country. This tree requires a good deal of rain and a hard soil, so that it is not found in the south-west or in the outlying villages, but there is comparatively much more waste still unbroken and covered with the hardier jand (prosopis spicigera), karir (capparis aphylla), &c. Trees (generally kikar and ber) are scattered about the fields along the village roads and near its site; and the result, except in the light-soiled villages to the south-west, is to give one the impression that the country is wellwooded. Government roads and canals have in places fine avenues of shisham, siris, &c., and there is also a considerable plantation under the Forest Department at the Phillaur road near the river. The Malaudh Sardars have two or three birs near Malaudh and Sahna which cover a good deal of ground. The following are the more common trees of spontaneous growth in the District :-

Vernacolor or Local Name.	Botanical Name.	Remares,
Kíkar	Acacis arabica	Grows in most parts of the District, but best in the east. Affects a stiff soil, and likes rain, but is very hardy. It is the saniudie's tree per excellence, being
Bér, beri	Zieppkus jujuba	most useful for all agricultural purposes and roofing. Grows in most parts of the Diafa, and does well in sanely soil Useful for its frait, and also for its wood for roofing. Is placted in groves as a protec-
Pipal: barota or bar,	Ficus religiosa; Ficus indica.	tion against sand drift. Crow in all parts of the Dhain, when planted; goue- rolly on the edge of the village pend; useful for shade only.
Pilkan	Ficus venosa	Takestho place of the above in the liet.

seniar or al Namo.	Botanical Name.	Remarks.
ah or far-	Tamaviz orientalis	Grows very generally where planted in the Bet, mostly round the village site - also, but more rarely, in the uplands. Useful for roofing.
m .	Dalbergia sısıu	Grown ulong roads, &c., by Government.
m . i		Grown in Bet and Dhaia, often in groves: wood nsefal for roofing, making doors, &c.
bakuin	Melsa sempervirens	
•••	Asadirachta indica	A good tree for shade; not very common; growing by itself both in Bet and Dháin. Wood aseful.
***	Morus	As above; wood useful.
jund and	Butea frondora	13
r.	Prosopis spicigera Capparis aphylla	Jangal trees (eee above in text).
)		There are one or two groves of this tree, which is use fal only for shade.

The fruit trees in the gardens about the city and elsewhere are usual ones of the Punjab plains. Oranges and loquats seem best; but the District is a bad one for fruit.

In newly formed land along the river is to be found the usual

oth of pilchi (tamarix orientalis) here known as jhao. It is very grasses, ul for making baskets and for lining temporary wells There in the Bet. so an abundant growth of dib grass (eragrostis cynosuroides), thich chitái or matting is made; and in places of a plant called

which, when young and tender, is used for fodder, and when hardens into a reed, used to make inferior pens. In the Budha a there is a weed called jala largely used in clarifying sugar. Sarkanda (saccharum munja) generally called sarwar, grows nany parts of the Dhaia, and is largely planted along roads, or

re there are sand hills to stop the drift, which it does more or effectually. This grass is put to various uses and is regularly ivated. The crop is cut in March or April, and the stubble nt to promote fresh growth. It begins to grow immediately r the rains, and attains a height of ten feet or upwards. Large is are realized by the sale of what is grown along the Governit roads: and in places round Ludhiána it is found profitable to e up the cultivation of inferior sandy soils to grow this plant, ere is also a shrub called jhárí, which deserves mention for its

fulness. It is a small, prickly bush, which grows in abundance he waste of most villages and, as it is called mallah in the Jangal, s probably the same as the wild ber (zizyphus nummularia). ice a year the growth in the village common land is cut and the duce carefully divided according to the proprietors' shares.

nen dry it is beaten with sticks and tossed with a pitchfork (salang) d the leaves thus separated from the branches, which make excellent hedge. The leaves are used as fodder, either alone or xed with straw, and are said to be most strengthening. Ak alotropis procera) grows all over the District in the fields, and is t for firewood.

CHAP. I, A. Physical Aspects. Flora: Trees.

Shrub,

CHAP. I, A. Physical Aspects.

The following complete list of the large mammals, the game birds, venomous snakes, and fishes commonly found in the District, was supplied by Mr. F. Field, who, in addition to his extensive knowledge of natural history, had a minute acquaintance with the District. During the past three years (1900-1902) rewards to the amount of Rs. 94 have been paid for the destruction of 19 wolves and 279 snakes:-

Fanna.

List of the larger mammals found in Ludhiána.

	1	
Name in English and Hindustáni,	Scientific Name,	Hobitat, Ao.
(tto-	Luira noir	Found ull along the Sutlej; grows to a large size, Also funed occasionally along the reedy bed of the old bed of the Sutlej during the cold weether,
Wild Cat—jongle bills.	Felis chous	Common about Ludhláus, and in all grass jungles throughout the District, where they do great damags to the game of all sorts.
Wal(– b h er i d , bhagiár.	Conie pallipes	Found scottared throughout the District chisfly along the banks of the Sirhind Cenal. They seem to have increesed within the last isw years und do consider- able dumnge to the villege goals and calves.
Jockal—gidar	Conis aureus	Common throughout the District.
Indion Fox— Iúmrí.	Vulpes bengalensis	Thioly scattered throughout the District.
Desert Fox-	Vulpes leucopus	Thinly scattered throughout the District. Reser in cultivated parts bot commoner than <i>V. bengalensis</i> towards the south and south-west.
Porpoise	Plantista gungetica (?) P. Indi.	Found in the Sutlej; commonor in the cold season, The one found here is probably P. Indi.
Hare—sahu, soyor, khurgosh.	Lepus ruficaudatus	Found everywhere throughout the District; most plautiful to the south-west, wherever there is self-cleut jungle; common all niong the canal banks.
Wild Pig—jangli 267.	Sus indicus	Found along the banks of the Sutlej wherever there is sufficient cover; but common nowhere. Chief hebitot the long grass in the jaugle to right of Railwey Lice to Philleur where bunds, &c., have been created.
Nfigni-rot	Portox pictus	A few ure found in south and south-west of District io juogles hordering on Native States, where, the Chiefs being Sikho, they are more or less preserved, and are
Autelope—mirg, harn.	Antelope besour ticu	more common, Found plentifully throughout the District; rarely visit the low loads but chiefly confine themselves to the upland, where there are lorge plains surrounded by cultivation. Formerly large herde were found, bot now it is rare to esso a hord of 100. In the south west of the District their ploce is token by the gozelle nod they are rerely or never soon. This is the more strange, as they are very common in Hissar and Sirsa Districts closely ressmhling the south-west of this in quality of soil, &c.
Gazelle—harni, chi-kāro.	Gorello Bennettii	The ravine deer of sportsmen, common throughout the District, chiefly where soud hillocks dot the plants very common to south west where it entirely sup- plants the autelope.

List of the yame birds found in Ludhiána.

CHAP. I, A.

Physical Aspects.

Fauna,

	Nams in Euglish and Hindustáni.	Soientifio Name.	Hebît &c.
799	Large Snud Grouso—bhat- titur.	Pterocles prenorius	Comes in immonse flights in the first week of November, though occasional small flights mey be seen in the end of October. It remains till
801	Lerge Pinteil Grouse -Bhat- tilar.	P. ulchnta	Merch and re-migratos north. Occesionelly found mixed up with P. prenursus, but rars. Probably more numerous to the
802	Small Snnd Grouse—Bhat- titur.	P. czustus	west and south-west of the District. The rock pigeon of some sportsmen; much rarnr then P. acenarius; commonest to south and south-west of the District.
803	Peacook-mor	Paro cristatus	Found in very many parts of the District. It is semi-domasticated, end is generally to be found near villeges. It is held secred by some of the villegers.
818	BlackPartridge— kála títur,	Francolinus vulgaris	Nowhere very common; but n few are to be found along the Sirbind Comel. Also found in all jungles to the south. Not common in the south-west, where the gray partridge has supplanted it.
822	Grey Partridge —titur.	Ortygornis pontj- cerianu.	
829	Quail—bater	Colurnia communis	Plantiful from April till the rubi is cat. They come again in September and stay till the lharif is cut; some fow hirds stay in long grass, &c., all the cold weathor, and a very few stay and breed hore in Juno and Jaly.
830	Rein Quail— bater.	Colurnis coromon- delica.	A rainy seeson visitor. It comes in in July whon its peculiar "wheet-wheet" is to be heard in cloudy weather all day. It leaves before C. communis arrives as a rule, though occasionally both hirds may be flushed in one field.
834	Lnrge Button Quail-buter.	Turniz dussumicrii	This bird is occesionally flushed when quali- shorting in Septembor and October, but is by no means plentiful and stays a vory short time.
835	Button Quail—	Turniz sykesii	Found occasionally in the spring and nutnmn crops. It has a very etrong scent, nod dogs invariably put them up, though they may fail to put up a common quail.
836	Grent Bustard— túghđár.	Eupodotis Ed-	During certain times of the year visits the conth-west of the District, probably during the hot weather and raine.
837	Obara—khur mohr lilur.	Houbara Mucqueen ii	
839	Losser Florican	Sypheotides auritus	Hos once this bird been seen in this District. It was in September and was omigrating probably. It was in the "Psoplo's Park" at Ludhian close to the civil etetion.
851	Lapwing-titiri	Vanellus cristatus	Found all along the Satlej, but objetly elong the hanks of the Budha Nála, whore it is plentiful during the cold weather.
853	White-tailed Lap- wing.	Cheitusia leucura	Common nlong the Budha Nale, every cold weather, notwithstanding Jordon's romark that it is a rere bird in India.
863	Serus Crans-	Grus untigone	Occasionally found in pairs, chiefly to the south.

List of the game birds found in Ludhiana—contd.

Game.

	Name in English and Hindustáai.	Scientific Nume.	Habitat, &c.
865	Keelan—kûnj	Grus cinerea	A cold weathor visitant in large numbers. It comes in in October and leaves in the end of March; spends the day near or on the river Sutlej, and flies inland to feed en the green
866	Demoisella Cranc —Lharkhair.	Anthropoides virgo	orops or sown grain merniag and aveaing. On its passage to and from lower Indis, this handsome bird occasionally stops to rest and focd on the Sutloj. It is only in October and the latter half of March that it is seen, and than only for a day at a time. It nover makes a prolonged stay hore, being more of
871	Suipo—cháha	Gallınago scolopaci nus.	a jhil-leving bird than its congener G, com- munis The fall saipo of sportsman. Common all along the Budha Nala and rushy places throughout the District. The first flight arrive about the middle of September; ne mere come till Oc- teber, when they straggle in; newhere to be found in considerable numbers till January. They etay till end of March, and the last flights pass through in the end of April.
872	Jack Suips-	G. gallinula	Arrive in the end of September and stay till
878	Painted Snips-	Rhynchæa benga- lensıs.	April. Found throughout the District, commonest in the early cold weather. Affects all the swamps and peole. Broeds in the District
875	Godwit-chdha	Limosa ægoccphala	where it has been seen all the year round. Found in the cold weather and beginning of the hot near the Satlej on all large pools and
877	Curlew- do.	Numentus arquata	swamps. Frequents the Budha Nála, and the landlying near the Sutlej, where it feeds in the fields, &c. A cold weather visitant.
044	Flamingo	Phonicoptorus roseus.	Stragglers no doubt visit this District during the late rains and carly cold weather. Shot cace at Miani.
949	Barrad-licadad Goose— mag.	Anser endicus	Visits the Dietrict in considerable numbers in the cold weather; stays from October to March. Spends the day by the rivers, visit- ing the gram fields island during the morn- ing and the fields near the rivers in the after-
950		Sarkidiornis melano.	
945	Goose—nagla Grey Goose—mag	notus. Anser cinereus	Mischlimfra, &c., in the rains. Visits the District during the cold weather, Habits ideatical with A, indicus. Some few flocks live in the interior of the District for
951	Whito-be died Goeso-teal.	Nettapus coromande- lianus.	cold weather and occasionally in the hot, along
952	Whistling Teal	Dendrocygna awsu-	the Sutlej and Budha Nála. Found during the hot weather all aloag the
254	murghábí, Ruddy Shieldrako —s u r k h á b, kasonk.	rec. Casarca rutila	Sudej. Visits the Budha Náls occasionnlly in the cold weather, and in considerable numbers the Sudej. Feeds often on gram inland in large
957	Shovoller-mur- ghábi.	Spainla clypsola	flocks. Visits the District in the cold weather, and may be found on all village tanks and juils till
958	Mallard—mur- ghábi.	Anas boschas	April. Celd weather hird, found in hugo flights on the Sutley and also on Badha Nála. Arrivos in
	ł.		Novembor.

List of the game birds found in Ludhiána-concld.

Physical Aspects.

Fauna.

===					
No. ia Jerdon			Habitat, &c.		
939	Spotted-billed Duck—murghú- bi.	Anas pecilorhyncha	The "Wux-bill" of some, found occusionally on the Sutloj and Budha Nala during the hot weather as well as the cold.		
961	Gadwall— do.	Chaulelasmus stre- perus.	Comes in October, and is very common in all juits as well as on the Sutlej and Budha. Nála, Comes at night in bago flights to feed on the		
962	Pintail de.	Dofila acula	woeds in the nalo. A few flights are seen every year. Commonest in the beginning of the year in the pends in the interior of the District.		
863	Widgcon- do.	Marcon penelope	Somo few are seee every cold weather, but never in any numbers.		
196	Tcal— do.	Querquedula erecea	One of the commonat cold weather hirds Found ie oil pools and on Sutlej and the Budha Nála; comes in eed of September and goes in April.		
965	Garganey – mur. ghábi.	Q, circia	Somo few visit the District in September and October, but disappear again till March. No- rhere very common.		
967	Red-crested Po- chard - marshabi	Braula rufina	Visits the Sutlej and Budha Nala in large num- hors in February and March. It has eise heen shot in July in the District.		
ວເວ	Whito Eyo-inur-	Aylhya nyroca	Visits the Intlej and Budha Nala in the cold weather.		
971	Golden Lyc- inurghábí,	Fuligula cristata	It is the tamest and commonest duck found occasionally a few flights visit the District in the winter, principally in March.		
	Whito-ben il e d Duckmurghābi,	Erismalura leucoce- phala			
972	Merganser - do.	Mergus castor	Found on the Sutlej occasionally though rarely during the cold weather.		
973 1001	Smow Grey Pelican — painh,	Mergellus albellus Pelecanus Philip- ponsis,	Found occasionally in the cold weather, Found in the Budha Nala and Sutlej during the hot weather and raios.		

List of the Thanatophidia or venomous snakes in Ludhiána.

Numo in English and Hindustâni.	Sciontilio Namo.	Habitet, &c.
Cobra—kálú sámp	Najn tripudians	The most deadly, as well as the most common, of oil the poisoness snakes to the more cultivated parts of the District, and wherever there is cultivation, gardons, &c. also in all the jangles. It grows to a large size, having been killed 6 feet long. In the open sandy parts of the District it is supplanted by E. carinala.
Ringed Snako- karast,	Bungarns cærnleus	Inliabits the same country os the cobra, except that it is not found in jongles. Commonest about gardens where there are old walls, &c. Hardly less deadly than the cobra, and as it has a hobit of curling up by doors and under chicks, &c., and not moving at the approach of man, it is a most dangerous sauke.
Russell's Viper	Daboia Russellii	
Chain Adder	Rohis carinata	

Namo in Eng nno Hindus		Scientific Name		Habitut, &c going species; otherwise there would be more he from snake-bite than there are. On being at night it never attempts to got out of the woy, curls mp in an attitude of defence and gives out sing naise by rubbing its carianted scales to-er. When a report of the poisonous senkes of District was being prepared in 1871 (?) o very t number of these snakes were brought in a captors said they found them under any old about the fields or villages on the higher lands, is the celebrated "Kapper" of Sindh probably is it appears to be more decodly than in the job.			
Chuin Adder	•••	Echis carinala	deaths from met at night hat curls up a bissing uning sther. Wit this District great numb Their captor logs about this is the				
	List of the commoner fishes found in Ludhiana.						
Hahásír	in In Ier	ad throoghoot the restant Bodhn the Sutlej they runge size, some specialing about 50lbs one oy spawe in the rein	Nåln. to a imens lover.		This fish is found after the rsius. It rons up ofter the honry fleeds in the rains, oud grows to o large size. Very commonly found 5 lis. in weight. It has a curious habit of rising coo-		
Holek	Found in the Sutlej ar Budha Nalo; is evon con than the mahdair. It in July ond Angust, It nbout 20 or 30 lbe.; large		d the monor pawns rune to Chepta	t	stantly to the surface of the woter and turning over, show- ing its very broad silvery side.		
Sewal	When ber how ties green was late	ns are tarely found, a in good condition on a tifish for the table e. There are saveral s. Its uppessance cha tatly with the season a toritis found in. It s in the year, and the	found varie- nages od the pawns Mulli roong	***	moner and is found all the year round, it has the habit of turning over on the sorfoce. It is a small lish, rerely weighing all, in weight. A common and very veracions fish, the thank of this part of the		
Backico	Duri her the	y be seen in countless in pools at that tim ug the rains, after the try floods bave swept Hudha Nain, this fight rou up. It is rare	o firat down begins ly in		world. It runs to a large size in the Sutled, and fair sized fish come up the Budhn Nála in the rains. It breeds in July and August like the volvá.		
i	not Cat	od condition owing ckness of the water, withstending the vering fish to be had be Sutled it is found in	but is y bost oro, In grent		A not very common and very repolsive-looking fish, very dark purple or rod. Soid to be a good table fish; but its looks keep people from trying it.		
Tingro	wh pro the Smn for	ontitios noar any ere young fish congreg sheldy migrates for p year and also to spa il specimens of this fi and in any anamhers dha Nála and Sotlo	ate, It art of wn. th see	4	Cummon in both the Sutloj and the Rudho Nåln, where in nu- tumn and spring it may be seen rising ut gnats in huadrods like trout. By all occounts, owing to excessive netting with small		
Eel or Bdm	rar me tim Com In fou	ely runs large, yet ns of 515s, or so ero are caught by the fishe moo in the Nálo nnd; the latter it is occasi od very large, S or veight, but in the 1	speci. some- rmeo. Rewa Satlej. pually 9 lbs.	***	meshed oete, this fish has been considerably thinned out neer towns. Something like n smull mahdsir, but with scoles like n grayling in parallel rows along the body, Hos n carious hobit of swimming in companies obont on the		

In the cold weather wild fowl are plentiful along the river and CHAP. I, A. the Budha Nála, but they are much disturbed in the neighbourhood of Ludhiána by native shikáris. Very fair snipe-shooting may be had under Machhiwara. Flocks of kúlan and geese are also to be met sport; small with in the fields. In the uplands there are a good many hares, game though the Jat of the present day is fond of coursing: and partridges, black and grey, are to be found in the sugarcane fields or where there is a small patch of jungle. Quails are abundant in their seasons; and sand grouse of several sorts are to be found in numbers in the cold weather amongst the moth, &c., stubble in sandy soils, as well as flocks of wild pigeon. Peacocks are common in the eastern part of the District, and live in the sugarcane fields. The ordinary Jats have no great objection to their being shot; but the birds are really half tame, and only eatable when young. Owing to the absence of cover it is not generally an easy matter to make a large bag, except, perhaps, amongst the quail or snipe; and one brings home from a day's shooting a most miscellaneous collection of game picked up in the fields. In some of the detached villages, which have a growth of jungle left, it is possible to get a good hag of grey partridge and hare: and there are some birs or reserves in Patiála territory which are strictly preserved and abound with game. Pigs are very common along the river just under Ludhiána They find shelter mostly in the forest plantation on the Phillaur road and in a large piece of land beside the river, covered with high grass, which has been taken up by the Railway to protect the bridge. The number of pigs appears to have increased within recent years; but it is only here that they are found. They come out at night in swarms and ravage the fields to great distances about, devoting most of their attention to sugarcane, maize, &c., of which they are fond; but also rooting up the young spring crops from sheer vice. They are fondest of the pour or thick sugarcane; and in Rajowal and other villages, where it is grown extensively, the people are out all night along the boundaries of their field with fires lighted and keeping up a continual noise. The pigs, however, do not appear to mind this, and get into the field. The amount of injury done by theso pests is very large; but no systematic attempt has been made to kill them down. It is not possible to ride after them owing to the broken nature of the country and the difficulty of getting them out. An occasional sportsman shoots a few, but the loss is not felt. The antelope and ravine deer are common in most places; and one has to go but a very few miles from Ludhiána to get a good black-buck. The deer are very tame; but shooting them is attended with considerable risk, owing to the perfectly flat nature of the country, and the number of people that are always working in the fields. Nilgai are found in some of the waste lands belonging to our detached villages.

Physical

CLIMATE.

The climate in general is that of the Puujab plains. The Siwaliks Temperature, Table 2 of are too far off to have much effect, and the Ferozepore District acts Part B.

changes,

CHAP-I.B. as a buffer between Ludhiana and the desert of Bikanir; consequently the hot winds and dust-storms that ravago Ferozepore in the hot weather are not felt with the same severity in this District. Tomperature, Within the District there are considerable variations of climate. The Dhaia is dry and healthy, though it has suffered in both respects from the opening of the canal. The Bet and the uplands, immediately overhanging the Budha Nala, are damp and malarious. The town of Ludhiana is very badly situated in this respect, but Máchhiwára, Kum and Bahlolpur are even worse.

RAINFALL.

Rainfall. The District enjoys a comparatively good rainfall. The yearly average for the decade ending 1900-01 is Tables 3 to 3 of Part B. shown in the margin for the three tahsil towns ... 29.38 Samrála 26'67 Ludbiána .. of the District. It will be seen that Samiála ... 24'87 Jagráon ... gets a slight advantage from its comparative proximity to the Sawáliks, while the shortage in Jagráon suggests the neighbourhood of Ferozepore.

> The greatest variability between the rainfall at these different stations appears in the year 1892-93, when Samrila registered 57:12 inches and Jagraon 28.70; Ludhiana striking a mean between the two at 43.49. This relation, however, is not always preserved. In 1898-99, Samrála got only 14 63 inches, while Ludhiána and Jagráon got 20.66 and 20.64 respectively. The largest rainfall in the decade was 57:12 inches at Samrala in 1892-93 and the smallest 12:07 at Jagráon in 1896-97.

> The Jangal villages stand quite by themselves in the matter of rainfall. Rain is generally scanty, and there are villages which consider themselves lucky if they get 15 inches in the year.

Section B.-History,

There are no signs to indicate that the Ludhiána District has Physical been the scene of any great physical change. The Sutlej appears to have been always confined to its present valley, though within it the river has shifted about a good deal. The last change took place about towards the end of the eighteenth century, when it abandoned its course, now the Budha Nala, under the ridge that separates the lowlands from the Dhaia bringing to this side the whole of the present Bet then for the most part uninhabited. The towns of Bahlolpur, Máchhiwára and Ludhiána, and the old villages, such as Kum and Bhundri, which lie on the top of the ridge, were built on its bank. There is nothing to show that the uplands were ever traversed by streams unless, indeed, the sand belts of Samrála Tabsil mark the course of former hill torrents. There are no local traditions pointing to this, but this source of information would not go back more than 300 or 400 years. It is clear that such changes as have taken place were the work of man and not of nature.

Few districts possess greater historical interest than Ludhiána, CHAP. I. B. which, lying as it does on the high road from Central Asia, must have been crossed by each successive wave of conquest or immigration; and in historical times we find that some of the most of the district decisive conflicts for empire took place in this neighbourhood. The in history. Punjab was always an outlying province of Hindustán, and its loss was not fatal; but, once across the Sutlej, an invader had nothing between him and Molhi. Porhaps the greatest interest attaches to the country as the scene of the struggles between rising Sikhism and the Muhammadans; and when at the beginning of the last contary the English power extended northwards the Sutley was fixed as the limit of its territories; and Ludhiuna was for nearly half a century our frontier garrison at the point where we were in contact with the only remaining independent power, that of the Punjab.

Importance

Little can be said of the Hindu period, for there is an absolute lory:

| Little can be said of the Hindu period, for there is an absolute lory: | Link to found anything resembling history. | Hindu dearth of materials on which to found anything resembling history. Mr. Tolbort writes: "I presume that it formed a portion of the period. kingdom of Magadha; Sanet, Tihára, Máchhiwára and Bahlolpur date from the Hindu period. It is said that Múchhiwárá is mentioned in the Malabharata, and that Bahlolpur formerly bore the name of Muhahatpura." It is true that, as he points out elsewhere, there are many Múchhiwárus, but there is some reason to believe that a large city existed in the neighbourhood of the present town. ground is covered with mounds, whose autiquity is shown by the large bricks found in them, and there are five wells, also built of large bricks, to the west of the town which seem to show that the city in ancient times lay in that direction. The people say that one well formerly hore an inscription that the digger had sunk 360 wells in Máchhiwára. It is possible that mitiquarium research may givo us some information, but at present it has been applied only to the mound at Smet three or four miles west of Ludhinna, which is of considerable extent, and clearly marks the site of an important city. It was visited by General Cunningham in 1878-79, and the result of his enquiries will be found at pages 65-67, Vol. XIV of the Archaeological Survey. General Canningham examined bricks, one or two sculptures and a number of coins; concerning the last he wrote: "From these coins the following facts may be deduced with almost absolute containty:-

Sanct

- "(1). The town of Smnet was in existence before the Christian era as evidenced by the coins of Uttamadatta and Amoghabhati. It continued to flourish during the whole period of the dominion of the Indo-Sevthians, and of their successors who used Sassanian types down to the time of Samenta Dewa, the Brahman King of Kabul and the Paujab."
- "(2). From the total absence of coins of the Tomara Rajas of Delhi as well of all the different Muhammadan dynastis, it would appear that Smet must have

CHAP. I, B. History. Sunet.

been destroyed during one of the invasions of Mahmud of Ghazni, and afterwards remained unoccupied for many centuries."

There are various legends about the destruction of Sunet mentioned by Cunningham, all of which represent the last Raja as living on human flesh and as owing his downfall to not having spared the only child of a Brahman widow. Mr. Tolbort appears to think that the town was overthrown by an earthquake. However this may be, it is likely that Sunet was the head-quarters of some Hindu kingdom, small or great; but more we cannot tell.

Tibára.

Current tradition identifies Tibara in the north-west corner of Jagraon Tabsil with the city of Varat mentioned in the Mahabharat. and this is said to have been its name up to Muhammadan times. It was a place of some importance under the Mughals; but the old town has long since disappeared in the river which ran under it, and the present site is at some distance from it. Tihara may have been the capital of a small Hindu kingdom. There was also a city called Mohabbatpur close to Bahlolpur; but of this too all traces have disappeared. It is quite possible that in Hindu times the country was to some extent inhabited by a nomad people, but that there were a good many towns and villages along the banks of the river; but they and the races that dwelt in them have long since disappeared, perhaps in the early Muhammadan invasions when the country was overrun by plundering Biluchis and other tribes.

General Cunningham does not mention the small square copper coins containing on one side the Buddhist wheel and on the other names of Rajas in old Sanskrit letters, which are still found. On the mound, besides coins, impressions of seals in burnt clay, seals in stone and copper, beads, carved bricks, large bricks, dice, glazed pottery and many other antiquities are still found also: as are impressions of coins of the Yandheyas in clay.

The following is an account taken from a Hindi paper by the late Sirdár Sir Atr Singh, K.C.I.E., Chief of Bhadaur, of M. Arura, a village which lies a little north of Bhadanr and 8 cos south of Jagraon.

1871).

"In old times, Arura was inhabited by Rajputs of the Pramura clan. (Proceed Many of the inhabitants were killed when the Muhammadaus invaded the Asiatic Socie. District, and many emigrated. Among the fugitives were also several ty of Bengal, families of Brahmans, and hence it is that certain clans, as, for example, the Kaligotra Brahmans of the hills of Chintapuri, look upon Arura as their original domicile."

> The Sirder then mentions several legends of Rai Fírúz, under whom Arura flourished. His tomb still exists, and in one of its inscriptions the year 1532 Samvat is legible. The old tank called Rániyáná near Arura is frequented by numerous pilgrims. Peoplo say that the ancient names of the place is Ahichatta, and that its ruler, Rájá Buddhamati, composed a work in Prakrit, entitled Dharma

the west, Tubsil Jugraon, &c.

PART A.

Katha, which is still used by the Paja tribe in the District. In CHAP. I.B. the 15th Chapter of this book, it is mentioned that a former prince of the city of Ahichatta, named Kanaka Kein, reigned at the time of Malayira Swimi, the twenty-fourth incarnation of Buddha. Under him the town was so large that Bhadar and the adjoining village were the submbs of Arum.

Ristory.

The ancestors of the present agricultural population cortainly put settlers, immigrated within the last 700 or 800 years. The Rajpaits were the first settlers, and came from the south. They say that in the reign of Muhammad of Ghor (A. D. 1157) their ancestors found the country all waste and obtained from the Emperor the grant of a large tract along the Sutlej, in which they settled. Their villages lie almost all along the ridge over the old course of the river, or in the valley beneath. They were followed by the Jats who mostly came from the same direction and began to sottle in the uplands 400 or 500 years ago, first in the eastern parts, and much later in

Early Rij.

There is no information about the District during the carlier under the Muhammadan invasions; and it is not till the time of the Lodis that Palkan its name is mentioned. The local history of Bute Shah, generally dynastics: very reliable, gives the following account of the first attempt to the low of establish a settled Government:-

Ludkiinaanil first erilled

"In the reign of Silandar, son of Bablol Lodi, the people about Ludhi- Government and were oppressed by the plundering Biluchis, and applied to the Emperor of the counter assistance. Sikandar, in answer to their prayer, cent two of his Lodie. Lodie chiefs, by name Yusaf Khan and Nihang Khan, with an array. These chiefs fixed on the present site of the Ludhismi city, which was then a village called Mir Hote, as their head-quarters and restored order to the country about. Youlf crossed the Sullej to check the Khokhais, who were then plundering the Jollandar Doah, and settled at Salainpur. Nihang Khan remained at Mir Hota as the Emperor's lieutenant; and called the place Ludbiana. He was succeeded by his son and grandsor. The latter, Julat Khan, built the fort of Ludhiam out of the bricks found His two sons partitioned the country round Ludhians, which was then lying waste, amongst the people of the town, and distributed them in villages. In the time of Jalal Khan's grandsons, Ala Khan and Khizr Khan, the Leli dynasty was overthrown by Babar; and the Ledis of landbiling runk to the position of ordinary subjects of the Mughal empire. They are said to have lived close to the fort for many generations, but all traces of them have now disappeared, and even the tombs of Nihang and his immediate descendants have been lost right of, ulthough they are said to have been standing some years ago."

Without vonching for the accuracy of this account it may be said that the founding of the town of Ludhiann, and the first systematic attempt to people the country about it, date from the rise of the Lodi family which subsequently held the throne of Delhi from 1450 to 1525. The earliest mention of the town appears to occur under the year 1420 when Tughun Rais, who was in rebellion against Khizr Khin and had overrun the country as far as Mansurpar and Pail, retreated across the Sutlej by the town of Ludhiana and CHAP. I. B. confronted the royal army sent against him from the other side of the river. In the reign of Mubárak Shah Jasrath, the Khokhar plundered the country from Ludhiána to Rupar, and the former town appears to have been held by the Khokhar chief, for he kept Zírak Khán prisoner there and made it the base of his attack on Sirhind, retreating to it when compelled to abandon the siege of that fortress. The imperial forces then advanced to Ludhiána, which Jasrath abandoned, but they were unable to pursue him across the Sutlej as it was the rainy season. Under Bahlol Lodi's beneficent administration the prosperity of the country reached its summit (Marshman), and the reign of his successor, Sikandar, was a most prosperous one. In 1500 we read of a Muhammadan governor of Máchhiwára being commissioned by that ruler to apprehend the recalcitrant governor

The Mughal Empire. of Delhi.

The progress of the country does not appear to have been impeded by the change of rulers, the Mughals established a strong government at Sirhind, to which Ludhinna and the country about it were attached as a mahal. Sirhind, with the rest of the empire, passed into the hands of the Súr dynasty; and it was at the town of Machhiwara, 25 miles east of Ludhiana, that Humayun fought the battle with Sikandar Sur, which restored him to the throne of Delhi in 1555. It is to the reign of Akbar (1556—1605) that most of the people in the eastern part of the District ascribe the advent of their ancestors and the founding of their villages, and it is most probable that before the commencement of the 16th century there were only a few villages scattered over the District (mostly Rújpút), and that the great immigration of Jats, who occupy the whole of the uplands, began under the settled rule of the Lodis and continued during the whole of the 16th century. The Ain-i-Akbari enumerates the following mahals (or parganas as we should call them): Tihura, Hatur, Bhundri, Ludhiána, Máchhiwára and also Pael and Duráha. The first three are still considerable villages in Jagrion Tahsil. town of Pael and the village of Duráha are in Patiála territory between Ludhiána and Samrála tahsil; and it is clear that these seven mahals, which were in the Sirhind division or Sarkar of the Delhi Province or Subah covered most of the present District and the adjoining parts of Patiála territory.

Rise of the Sikhs and decline of the Empire. During the century-and-a-half which followed the death of Akbar, historical interest centres for this part of the country in the rise of Sikhism as a power, and the constant struggles between, first, the followers of the Gurus, and latterly the Phulkián and other Sikh chiefs on the one hand, and the local representatives of the empire on the other. The life of Nának was contemporary with the Lodi dynasty: and Hargovind, the sixth Guru, was engaged during the latter years of Jahángír's reign in petty warfare with the imperial troops. Aurangzeb ascended the throne in 1657; and the ninth Guru, Tegh Báhadur, was murdered by his orders at Delhi in 1675. Govind Singh, the last of the Gurus, succeeded

PART A.

Tegh Bahádur; and under him commenced the long struggle between the Cis-Sutlej Siklıs and the Muhammadan Governors of Sirhind, which was only a part of Aurangzeb's persecution of the rising sect. This district, with the adjoining country to the south, Sikhs and was the scene of many of the great Gurn's wanderings and encounters with his onemies; and in Sirhind his wife and children wore murdered about the year 1700—a deed that has made the place for over accursed to all true Sikhs. It is probably to the bigotry and porsecution of Aurangzeb (whose memory the Sikhs to this day hold in great detestation, invariably referring to him as "Ranga") that we should ascribe the union of the followers of the Gurus into a militant power. Aurangzeb died in 1707 and Govind Singh in 1708. The latter was succeeded by Banda, under whom the imperial troops were defeated and Sirhind sacked in 1705. But although they twice ovorran the country between the Sutlej and the Jumna, they were finally dispersed, and Banda taken and oxecuted in 1716. For a generation after this the Sikhs were much depressed and persecuted; and it was only whon all energy had departed from the empire that they were able to raise their heads again. From this time the struggle was continued by the Phulkian and other chiefs, who saw their way to establishing kingdoms for themselves on the ruins of the empire, now tottering to its fall. Ala Singh, the founder of the Patiála house, succeeded his father Ráma in 1714; he was a contemporary of Rai Kalha (II) of Raikot, under whom the Rais of Raikot, who had hithorto hold the lease of a considerable tract from the emperors (see history of the family in section C of this Chapter), first asserted their indopendence. The District as new constituted cannot be said to have a separate history during these times and it would be impossible to detail here the conflicts between the various claimants for its territory. The principal were the Rai, Raja Ala Singh of Patiala, and the representative of the Delhi Empire at Sirhind. In 1741 we find a combination of the two last against Rai Kalha, who had been endoayonring to throw off the Imperial authority. Rai Kalha was defeated and chased out of the country, but he soon recovered the territory which he had hitherto held as a fief of Delhi. The alliance between the Sikhs and the imperial troops lasted for a very short time, and the Rai was then able to extend his territories unopposed, there being plenty of room for him to do so at the expense of the empire without danger to the schemes of the Sikh chiefs. In a foot-note to page 60 of the "Punjab Rájás" is given a short skotch of the history of the Rais, and it is said that they got possession of the town of Ludhiána in 1620 A. D.; but this is evidently a mistako. The town and fort of Ludhiana did not fall into the hands of the Rais till about 1760.

The invading army of Nadir Shah Durani crossed the Sutley harani at Ludhiana, then on its banks, and marched through the District is the taking along the Imperial highway between Lahoro and Delhi, the course of of Sirhiad by the present Grand Trunk Road and Railway. Nádir Sháh is said (1738-1703),

CHAP. I, B. History.

Rise of the

CHAP. I, B. to have ordered a general massacre of the inhabitants of Ludhiána History. for some petty fault; but it is doubtful if he did so.

Ahmad Shah entered India on his first expedition in 1747. On Duráni invasions reaching the Sutlej at Ladhiana, he found his passage opposed by to the taking of Sirhind by the son of the emperor and the Wazir Kamardin, with a large army the Sikh's from Sirhind. Ahmad Shah, adopting the usual Durani tactics, made

a long night march up the right bank of the river; and crossing about Máchhiwára or Bahlolpur, endeavoured to throw himself between the forces of the Wazir and Sirhind. The two armies met on a sandy plain between the villages of Manupur, Barwell, &c., a few miles to the north-east of Khanna, in Samrala Tahsil. The Imperial troops took up a strong position from which the Duráni could not dislodge. them. Desultory fighting went on for many days, and in one of the skirmishes Kamardín was killed. His son, the distinguished Mír Mannu, was equal to the occasion and, seating the body of his father on an elephant, paraded it before the troops. Ahmad Shah had finally to retire discomfited. It is said by the villagors that the loss on both sides was very heavy and that for a long time the stench of the dead bodies made cultivation impossible. To the subsequent invasions of Ahmad Shah no resistance was attempted by the Imperial troops in Sirhind, but his armies were constantly harassed by the Phulkian chiefs and the Rais. It was about 1760 that the Rais were permitted by him to take possession of the town and fort of Ludhiána and to extend their power over the country. In 1761 Zain Khán was appointed Governor of Sirhind by Ahmad Shah. In the following year there was a formidable combination against Zain Khán of all the Phulkián and other Sikh Cis-Sutlej chiefs, assisted by numerous bands of Sikhs from the Maniha or Punjab Proper. Ahmad Shah heard of this at Lahore; and, marching to the Sutlej in two days, he crossed at Ludhiana and fell upon the allies a short distance to the south of it just as they were attacking Zain Khán. The Sikh army was cut to pieces and the fugitives pursued to a great distance. This disaster (called the ghalu ghara, or great massacre) does not appear to have had much effect on the Sikhs, for in the following year, 1763, they were able to bring together a large army composed of the Cis-Sutlei Sikhs, aided by bodies of their co-religionists from across the Sntlej. Zain Khán was defeated and slain, and the Sikhs, following their victory, took possession of Sirhind, which they levelled with the ground.

Partit i o n of the coun-

With the fall of Sirhind vanished the last vestige of Imperial try after the control over that portion of the empire of which it was the headfilled Sirblad, quarters; and when in the next year Ahmad Shah passed through the country he recognized this by appointing Rája Ala Singh of Patiala to be Governor. In 1767 Ahmad Shah reached Ludhiana on his last expedition into India but got no further. He confirmed Amar Singh, the grandson of Ala Singh, in the government of Sirhind, and gave him the title of Maharaja; and from this time the Sikhs and other chiefs who had taken possession of the country.

PART A.

were left alone to settle their own affairs. The Imperial authority CHAP. I, B. had to the last been maintained over most of the country lying between Ludhiana and Umballa, and round the head-quarters of the Sarkar. On the fall of Sirhind the whole of this rich tract fell into the country the hands of the Phulkians and their Manjha allies. The present of Sirhind. Samrála Tabsil and a small portion of the east of Ludhiána were partitioned between the latter, each chief and confederacy seizing as many villages as they could. The eastern boundary of the territory of the Rais had in the few years preceding the capture of Sirhind been quietly advanced eastwards from Badowil, Dhindra, &c., so as to include the town of Ludhiana and the whole of the villages in the uplands south and east of it to within a few miles of Machhiwara. Their northern boundary was the river Sutlej. The lewlands opposite them were held by the Kakar Sirdars and Diwan Mohkam Chand to the south of Ludhiana and to the north by Tara Singh Ghaiba (also a Kakar). There was then no Bet on this side. The Malaudh Sirdárs had already established themselves in the south of Ludhiana Tahsil (the Jangal villages and the country about Malaudh); and Sudha Singh, Gil, an adventurer from Loháru in the Ferozepore District, secured a few villages about Sánahwál. With these two exceptions the whole of the present uplands of Jagraon and Ludhiána Talisils with a considerable part of the Moga and Zira Tabsils of Ferozepore, in all 1,360 villages, it is said, belonged to the Rais. Samrála Tabsil was divided as follows: Sudha Singh, Bájwa, seized Múchlimíra and the eastern portions of the Utálan pargana, and the western halffell into the hands of the Ladhran Sirdárs. In pargana Khanna some villages were held by a servant of Tura Singh Ghaiba who subsequently set up for himself at Khauna; and the rest was divided between the Khéri, Bhari, Ajner, and Jabu Mazra Sirdárs and members of the Sontiwila and Nishanwala confederacies. Jassa Singh, Ahluwilia, of Kapurthala got 30 or 40 villages round Isru. Under the Rais the Garewals of Raipur and Gujarwal had some sort of local authority in the surrounding villages; but they were only "málguzárs" or contractors for the revenue.

Twelvo years after the fall of Sirhind, about 1785 A.D. Change in occurred a great change in the course of the Sutlej, the whole of the river's what is now the Bet, a tract over 50 miles in length and 5 or 6 in width coming to this side. It was at the time in the possession of tho Kákars, Tára Singh Ghaiba, whose head-quarters were at Ráhon, having the upper and his brothren the lower portion,—now the Nurpur pargana; and these chiefs retained their hold except where Sudha Singh of Sánahwál seized somo uninhabited portions in front of his upland villages, about Matewarah. Thore was then very little cultivation in the tract, the villages being few and far between. Most of the present ones owe their foundation to these chiefs, and date from within the last 120 years.

The Rais had a number of forts at different places and each Sikh chief erected one or two according to the size of his possessions.

CHAP. I.B. History. This partition of the country appears to have been recognized by the various parties to it; and during the last forty years of the 18th century they do not seem to have attempted any encroachment on each other's territories but to have gone on very amicably.

State of the country et this period.

The condition of the country during that period was one of considerable prosperity. The rule of the Rais is still spoken of as very mild, and it is said that they fixed only one-fourth of the produce as their due. The peasantry were probably very glad to see the long struggle finally ended; and the petty chiefs appear to have done their best to encourage cultivation. They took a full revenue in kind and exercised a good deal of petty tyranny; but one does not hear much of exactions in the early years of their rule, and they had scarcely time to engage in petty quarrels amongst themselves before the arrival of Ranjít Singh. One hears of but few instances of proprietary bodies being driven to desert their land by the oppression of the rulers, and the condition of the people was very much better at this time than it was subsequently under the followers of Ranjít Singh.

Attacks of Sikhs from ecross the Satlej: the Bedfs.

The peace which the country enjoyed after the fall of Sirhind was interrupted by Bedi Sahib Singh of Una. This fanatic crossed the Sutlej in 1794 A.D., with an army of Sikhs from the Jullundur Dohb, proclaiming a religious war against the Pathans of Máler Kotla. From this he was turned aside by the Patiála chief, but in 1798 again crossed and made a similar attack on the Rais of Raikot. Rai Aliás was a minor; but his agent Roshan, Gújar, made a good stand against the Sikhs at Jodh, ten miles south-west of Ludhiana. He was however killed and the Rai's army dispersed; but the Phulkian chiefs, who had always been on good terms with their Muhammadan neighbours of Kotla and Raikot, and who had no intention of allowing the Bedi to establish himself in their midst, now came to the assistance of the Rai, and drove the invaders out of most of the villages seized by them. The Bedi thereon invested the fort of Ludhiana; and the Rai called in the adventurer George Thomas from Hánsi. On Thomas' approach the Bedi retired across the river, and ceased to trouble the country.

Maharaja
RanjitSingh's
invasions and
amexations:
extinction of
the power
of the Rais
division of
the country.

The capture of Delhi in 1803 brought the English into direct contact with the Cis-Sutlej chiefs from the south, and about the same time Ranjít Singh, having extended his dominions to the north bank of the Sutlej, began to think of conquest beyond it. The disputes between the States of Patiála, Nábha and Jínd afforded him the desired opportunity, and in July 1806 he crossed the Sutlej. The last of the Rais (Aliás) had been killed while hunting in 1802; and the family was represented by his widow, Bhág Bhari, and his mother, Nur-ul-Nisa. No opposition was offered to Ranjít Singh, who took pessession of the town and fort of Ludhiána, and made them over with the adjacent villages to his nephew Rája Bhág Singh of Jínd. He proceeded to Patiála on pretence of settling the disputes

between the three chiefs, and returned to the Punjab vid Umballa CHAP. I. B. and Thánesar. In the following year (1807) he was again called in; and, crossing at the Hariki ford (Sobráen), he preceded to Patiála, and thence into Umballa District where he besieged and Ranjit Singh's took Naraingarh. In these two expeditions Ranjit Singh, besides invasinus and annexations: stripping the Rais of all their territory save two or three villages antinction of given them for maintenance, also annexed the possessions on this side the power of the Rais: of the river held by his widew, Rani Lachmi of Sudha Singh (Sanahwal division of as well as those of Tara Singh Gluaba, also held by a widew, and the the country. Kákar villages). The speilation of the Ghaiba family was perhaps the most shameless of all these transactions, as Tara Singh had died in that very year while accompanying the Maharaja on his expedition. These conquests were divided by the Maharaja between himself and his adherents. Rája Bhág Singh of Jínd got about 100 villages round Ludhiána and in the Bassian iláqa; Sirdár Fatteh Singh, Ahlawilia (ancestor of the present Kapurthala chief), nearly the whele of the Jagnien Tahsil and the Dakha pargana; Sirdar Gurdit Singh of Lidwa a number of villages about Badowil; Bhái Lál Singh of Kaithal, 16 villages abent Gujarwal; the Nabha chief, some villages in Pakhewal; while mon of less note, such as the Sedhis of Nandpur, got jagirs. Diwan Mohkam Chand was put in charge of the country reserved by Ranjit Singh for himself.

By this time the British Government had made up its mind Interference that further aggressions by Ranjít Singh on our side of the Sutlej of the British Government: should be stopped and the chiefs taken under our protection. Mr. trnaty of Metcalfe was despatched to conclude a treaty with Ranjit Singh and 1809, joined his camp at Kasúr in Soptember 1808. Immediately after this Cantonment Ranjít Singh crossed the Sutlej on his third invasion and attacked not Ludhisna. Faridket and Maler Ketla, netwithstanding the remonstrances of our envoy. After accomplishing his objects he returned to Amritsar, and there Mr. Motcalfe communicated to him the decision at which the Gevernment had arrived—that all conquests made in his first two expeditions might be retained, but that for the future the country between the Sntlej and Jumna was to be considered under our protection, and all territory soized during the last expedition restored. To support this demand a force under Colonel Ochterleny was moved towards the frentier, and on February 18th. 1809, the troops reached Ludhiana and took up a position there. It is matter of history how Ranjit Singh finally yielded to all our demands and entered into the treaty of 25th April 1809, by which he and his dependents were allowed to retain all territory on our side of the Sutlej acquired in 1806 and 1807. The occupation of Ludhiina as a military outpost was intended to be temperary only: but the troops were never withdrawn. We had by the treaty taken under our protection all the Cis-Sutlej chiefs, except these who had been brought into the country by Ranjit Singh; and the management of our concerns with them required the presence of a Political Agent and a force at this point.

CHAP. I. B.

History. History of the country from 1809 to 1835 : our first

territory.

General Ochterlony held political charge at Ludhiána from 1809 to 1815, and was succeeded by Captain Murray, after whom came Sir Claude Wade. (1823-38) Sir D. Ochterlony and Sir C. Wade had the full powers of agents, but otherwise the post was held by an assistant. It was General Ochterlony who gave the fort its present acquisition of form and Ranjit Singh set up that of Phillour to face it after the conclusion of the treaty of 1809. In 1835 Rája Sangat Singh of Jind died, and with him the direct line of the house failed. The escheat of the Jind territory, or at least of all that Ranjit Singh had bestowed on Raja Bhag Singh, was claimed by the former; but it was finally decided that Saráp Singh, a collateral of the late Rája, should succeed to the ancient possessions held by Raja Gajpat Singh and that all subsequent acquisitions should escheat to the British Government unless they had been granted by the Mahárája after the treaty of 1809 ("Punjab Rájas," p. 34, et eeq). By this decision we acquired upwards of 80 villages round Ludhiana and Bassian, with a revenue of about Rs. 1,00,000; and these formed the nucleus of the present District, the administration being carried on for the next ten years by the Assistant Political Agents at Ludhiána, a list of whom will be found at p. 306 of the Punjab Rajas, and also in para. 35 of the Settlement Report by Mr. Davidson.

Circumstan. ces leading to the first Sikh war (1835— 1845),

Ranjít Singh died in 1839, and his death was followed by six years of disorder. It would be out of place here to give a detailed account of the circumstances which led to the outbreak of the first Sikh war; but a short notice of our position south of the Sutlej is necessary, as the neighbourhood of Ludhiana was the scene of part of the struggle between us and the Khalsa army, and the position was throughout of the first importance. Up to 1838 Ludhiána was our only outpost on the Punjab frontier; but in that year a large force was assembled at Ferozepore for the invasion of Afghánistán, and that place threw Ludhiana into the shade, being within easier reach of Lahore. Ferozepore and the territory round it had lapsed to us on the death of Ráni Lachman Kaur in 1835, and about 1838 Sir George Clerk, the Governor-General's Agent at Umballa, built the residency at Bassian, a point from which communications could readily be maintained and control exercised over the Phulkian chiefs. On the withdrawal of the army from Afghánistán in 1842 our position in the Cis-Sutlej territory west of Umballa was this-We had two patches of territory on the Sutlej in the neighbourhood of Ludhiana and Ferozepore, which were completely isolated, and surrounded by the possessions of the Lahore Darbar and its fendatories. Map No. IV accompanying the Revised Settlement Report shows the division of the country at the time between the various States and petty chiefs.

The Suilej Campaign.

In December 1845 the Khalsa army crossed the Sutlej, and the first Sikh war commenced. The chief interest centres round Ferozepore, which was the main point of the Sikh attack; and there the bulk of our force collected, the troops for the most part marching

direct via Bassian, while Ludhiana was left with a mere garrison. CHAP. I. B But the position was not one likely to be neglected, as it covered the communications in our rear, and its importance was probably appreciated by the Sikhs, for in January 1846 their general, Rau- Campaign. jodh Singh Majithia, created a diversion by appearing with an army at Phillonr and crossing the Satlej. His force consisted of 10,000 infantry, with 60 guns and some cavalry. His presence on this side of the Sutlej was fraught with the greatest danger to us, as in a struggle with the Lahore Sikhs we could at most expect little botter than neutrality from their co-religionists on this side. The position of such chiefs as had territories on both sides of the Sutlej scarcely left them a choice. Nihil Singh, Ahluwilia, tried to play a double game. His troops fought against as about Ferozepore, and a considerable body of them joined Ranjodh Singh near Ludhiana while their master was professing friendship to us, and saying that he had no power over them. The Lidwa chief, whose head-quarters were at Badowil, and who had everything to lose by such conduct. openly went over to Ranjodh Singh while he was still on the Jullandur side of the river. Such was the weakness of the Ludhiana garrison that he was ablo before crossing to lmrn a portion of the cantonments, and no attempt was made to har the massage of Runjodh Singh's army which had our communications at its morey. Such a state of affairs was not likely to last long; and Sir Harry Smith was soon despatched from Ferozepore with a force of about 4,000 men to keep open the road to Ludhiana. On January 20th he Badowal, reached Jagraon, while Ranjodh Singh occupied Badowil. Sir Harry Smith's object was to effect a junction with the Ludhiana garrison without coming into collision with the enemy, and he accordingly attempted to pass to the south of their position. But his flank was attacked on January 21st by the Sikhs with great violence noar Badowil, and our troops, wearied with a long march, were for some time in considerable danger. They were extricated from the position and brought into Ludhiana with a loss of 200 men and nearly the whole of the haggage. This action was most damaging to our prestige; but its effects had scarcely time to be felt before they were effaced by a complete success. On the 22nd January, Ranjodh Singh moved to Bhandri on the Satlej where he was joined by some regular troops of the Lahoro army, his strongth being thus raised to 15,000; and here he remained quietly for a week, having, as he hoped, a clear line of retreat, commanding the road along the Sutley between Ferozopore and Ludhiana. General Smith was also reinforced, and on the 27th January marched against the Sikhs. He found them posted in the low land close to the Sutlej, with their right resting on the village of Blundri, on the high hank, and their left on Aliwal, close to the river. East of Bhundri the ridge, which separates the valley of the Sutlej from the uplands, sweeps inwards in a semi- Alimil. circle crowned with villages at intervals for five or six miles, and leaves a wide open plain between it and the river. Across this plain the British army on the morning of January 28th moved to the

History. The Satlei

CHAP. I, B. History. Battle of Aliwal.

attack, the capture of Aliwal, the key of the Sikh position being their first object. The Sikh gans were as usual well sorved; but Aliwal was held by inferior troops who made a spiritless resistance. By the capture of Aliwal the Sikh left was turned, but round the village of Bhundri their right, composed of trained and enthusiastic Khalsa troops (Avitabile's regiments) made a most determined stand, and the battle is still called by natives "the fight of Bhundri." The most gallant part of the action was the charge by the 16th Lancors of the unbroken Sikh infantry, who received them in squares. Throe times the Sikhs were ridden over, but they at once reformed on each occasion; and it was not till the whole strength of our army was brought to bear that they were at length compelled to turn. Tho Sikh troops were either driven across the river, in which many were drowned, or dispersed over the uplands. Our loss was considerable, amounting to 400 men killed and wounded. A tall monument, erected in the centre of the plain to the memory of those who fell, marks the scene of the action.

Close of the

The battle of Aliwal cleared the upper Sutlei of our enemies. Campaign rendered our communications sure, and enabled Sir Harry Smith and annexa-tion of the to join the army of the lower Sutlej with his victorious force. On Cie-Sutlei the 11th of February the crowning victory of Sobraon was won, and the first Sikh war ended. The abrogation of the treaty of 1809, and the annexation of all Lahore territory on this side of the river. were its natural results; and it remained to settle accounts with the Cis-Sutlej chiefs who had either been in active opposition to us, or had withheld their assistance when it was most needed. The Ladwa chief forfeited all his possessions, and the Ahluwilia chief all those on this side, while the Nábha Rája lost one quarter of his territory (for a detailed account of these transactions see "Punjab Rájas"). Those of the minor chiefs, who had not openly joined the enemy were maintained in their possessions as jágírdárs, independent power being given only to the Phulkian Rajas and the Maler Kotla Nawabs. Where the chief had gone against us, his villages were confiscated. From these acquisitions was formed in 1847 the present Ludhiána District, after a trial of Badni as head-quarters for a short period. Trifling changes have since occurred; and the map above referred to shows whence the various parts of the District, as it is now constituted, were acquired. A full account of the treatment of the petty chiefs whose territories were not confiscated will be found at pages 186-200 of the "Punjab Rájás." Police powers and the right to levy transit duties were taken away from them at once; and, when the whole Punjab became ours in 1849, they lost all civil, criminal and fiscal jurisdiction, a cash demand being at the same time substituted for their right to an undefined share of the produce. Thereafter they were "considered as no more than ordinary subjects of the British Government, in possession of certain exceptional privileges." A commutation was also fixed in place of the levies which the bound to furnish to the paramount power.

To the work of conquest succeeded that of settling our new CHAP. I. B. In passing we may mention the calamity which occurred to the 50th British Regiment shortly after its return to History from cantonments. It had suffered severely in the battles about Feroze- 1846 to 1857. pore and by sickness during the campaign, and was enjoying a well-earned rest, when in a dust storm one of the principal barrack buildings fell, crushing to death 210 men, women and children. When in 1849 the Punjab was annexed, Ludhiána ceased to be of importance as a military station. The cantonments were finally abandoned in 1854, and the fort is now only garrisoned by half a company of Native Infantry. During the ten years succeeding the Sutlei campaign Ludhiána is to be pronounced happy as having no annals. The work of administration progressed and the resources of the country developed rapidly under the security given by our rule. A summary assessment in 1846-47 of the new acquisitions was followed in 1849-53 by a Regular Settlement of the whole District. Cultivation increased and trade began to flourish in consequence of the removal of the transit duties, and the improvement of communications.

The following account of the events of 1857 is taken from the Punjab Mutiny Report. Mr. Ricketts had a most difficult part to play, and ably did he acquit himself. The town of Ludhiana commanded the high road from Delhi to the Punjab. It stood on the bank of the Sutlej at the head of the bridge-of-boats connecting Hindustán with the Punjab Proper. It was filled with a dissolute, lawless mixed population of Kabul pensionors, Kashmiri shawl-workers, Gujars, Baurias and other predatory races. There was a fort without Europeans to guard it, a city without regular troops to restrain it, a district traversed by roads in every direction, joining the seven commercial towns which form the emporta of its trade, and situated on a river which for months in the year is a mere network of fordable creeks which could only be guarded by a cordon of regular troops. Mr. Ricketts had for his Jail and treasury-guard a company of enemies in the shape of a detachment of the 3rd Native Infantry, and on the breaking out of the mutiny received another company of the same regiment. As there was no dependence to be placed upon these men he summoned the feudal chiefs and the independent States to send him troops. The chiefs of Nabha and Maler Kotla sent in their men, to whom the safety of the station was entrusted. Detachments of these troops were likewise charged with the protection of the eight high roads that intersect the District, of the ferries. the fords and the ghats. The undisciplined Nabha troops unfortunately failed Mr. Nicketts in his hour of need. They would not follow the Jullundur mutineers; but this is not to be ascribed to any lukewarmness of their master. He was a staunch ally to us throughont. Other natives who materially aided the Deputy Commissioner were Mith Singh, Basant Singh, the Sultan chaudhris; and of the Kábul pensioners the following, viz., Hassan Khán, Abdul Rahmán, Saleh Mahomed, Shahpur and Sháhzádá Sikandar.

The Mutiny

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History.
The Mutiny (1857).

On May 15th Mr. Ricketts sent his treasure to Phillour fort. It was placed under the charge of Mr. Thornton, Assistant Commissioner, whose labour in connection with it was greatly increased by the nocessity of having to go to and fro a distance of seven miles across the swollen river on sudden and constant calls for money. At the same time Mr. Ricketts concentrated his police from the District at the station, adding by this movement 80 men to the force at his disposal for overawing the city. As a specimen of the vast amount of miscellaneous work entailed upon District Officers generally during the mutiny, an extract from Mr. Ricketts' report may be given showing what he was obliged to do:—

"Supervision began to be exercised over the post office; every post without exception, till October, was opened and sorted by my assistants or myself, and great and endless were the irregularities: extra ammunition was distributed throughout the District police; supplies were accumulated at the different encamping-grounds and halting-places; the prisoners were looked to and re-ironed; materials were collected for the bridge-of-bonts. and the repair of its approaches; a staff of artizans and labourers, and an increased guard of picked Sikhs, were posted there. Parties of Jágírdári or contingent horse were posted at all the talisils and thans, and along all the roads. Proclamations of reward for the apprehension of deserters were promulgated, arms for the irregulars were escorted to Ferozepore through the deserting sepoys; ladies and children were sent ont of the station and across the Sutlej to Phillour, where they had the advantage of a place of refuge in the fort garrisoned by Europeans; carriage for the transport of all kinds of army stores was collected; the bullock train arrangements were taken in hand; and the commissariat for European detachments passing through the executive in both these departments devolved, under existing circumstances, on the District Officer, until at a subsequent date the transport service was separately organized; also supervision was justituted over all dealers in sulphur and lead and vendors of caps; a system of passports for all travellers was instituted. Hu dustinis supposed to be tainted were weeded out of all departments. The fort, after it was kindly vacated by the mutineers, was emptied of all its munitions of war, which were sent to Delhi; it was provisioned in case its defence became essential, which was fortunately unnecessary, as its woll supplies no drinkable water; and it was placed in some sort of repair. A regiment of Sikhs was raised, in which all furlough men belonging to the district and on leave from their regiments were incorporated. Horses were collected for service at Delhi; 200 men were taised for Hodson's Horse, 50 old Sikh golandázes (or artillerymen) survivors fram Sobráon, were culisted for serv co before Delhi; 500 or 600 Sikhs and Mazbis were enrolled as pioneers; 250 (I think) dooly-bearers were engaged and sent to Delhi fur the transport service; 200 men were raised for the North-Western Provinces Police battalion. The men on furlough from the Ferozepore and Ludhiana Sikh regiments were formed, to the number of 140 or (thereabouts), into one body, were armed and sent down to the Muzaffarnagar District, where they me still watching the Robilkund rebels. Estimates were formed of the amount of cattle available for provisions for the vast increase of European troops; and, lastly, the manufacturing classes in the town were set to work at sand-bogs for D. Ihi. at tent-cloth (of which 300,000 yards were made for tents for European troops), and on saddles for horse artillery; artivaus were furnished for the magazines at Ferozepore and Phillour, and musous and carpenters for the new European barracks in course of construction in the CHAP. I. B. hill stations; and so on, in various ways which have escaped my notes and my memory. The internal resources of the district were brought into play to meet the demands of the times, whilst the spirit of the people was taken advantage of to commit them to the quarrel against the common enemy, and the various subordinate official departments were roused by rewards freely given, and by punishments, sharp and severe, to lend their co-operation.

History. The Mutiny

(1857).

Mr. Ricketts, Lieutenant Yorke, and Captains Cox (Her Majesty's 53rd) and Campboll nightly patrolled the streets of the city at any time between 10 P.M. and 2 A.M. Captain Nicolls, Assistant Commissioner, was entrusted with the duty of forming a Sikh regiment which the Chief Commissioner ordered to be raised.

But the event which must call into prominent notice the bad qualities of Ludhiana and the excellence of its officers was the transit of the Jullundur mutineers on the 8th June. A short time previous to the arrival of the mutineers, Mr. Ricketts had received information that all the armourers and furbishers of the city were plying a most profitable trade. This could be for no good purpose. Ho resolved to disarm the city on the first opportunity. One presented itself whon Major Coko's corps, the 1st Pnnjab Infantiv, reached Ludhina on its way to Delhi. At dawn on the 20th June, on tho inhabitants issuing from their homes, they found themselvos confronted at every street-crossing, at every market place, by bands of these ferocious warriors, and sent back to their homes. Bodies of police under European officers ontered each house and took the arms concealed thorein. Eleven cartloads of arms were thus discovered and soized. The inhabitants had shown the animus which had prompted them, in accumulating those arms by joining the Jullundur mutineers on their passage through a few days previous, by burning the church and the mission, by pillaging the mission-houses, by aiding the mutineers to mount heavy ordnance on the fort which the mutinous 3rd had delivered up, by supplying them with food and water, and by pointing out the residences of Government officers for plunder and destruction. This pillage could not be provented by the civil authorities. News of the Jullandar mutiny did not reach them till 11 hours after it took place, when the mutmeers were already crossing the river, and had joined the 3rd Native Infantry at Phillour. Mr. Ricketts promptly wont out to encounter the mutineers, scarched for thom all day, and came upon them after nightfull. His auxiliaries fled; his solo supportors were a detachment of Captain Rothney's corps, the 4th Sikhs, under Lieutenant Williams, who was sovorely wounded; he had to work a gun with his own hands until his ammunition ran out, and then was obliged reluctantly to retroat. At Julhundur and Ludhiána, as in vory many other places, the rebels had outwitted themselves. In their eager hurry to escape from Jullandar, they took blank cartridges and left the balled eartridges behind. They arrived at Ludhiana, and in the height of heir triumph at occupying the fort found, to their dismay, that it

The Mutiny (1857).

CHAP. I. B. contained wast stores of guns and powder, but no shot. They had none with them, not even musket balls. To remain was useless. They evacuated Ludhiána and reached Delhi in safety, owing to the weakness of the pursuit which was made by the military from Jullundur. However Ludhiana was saved. The grand trunk road remained in our power. None suffered eventually from the riot except the rioters themselves and the city which harboured them. Twenty-two of the plunderers were hanged the next day, and the city was fined Rs. 55.294.

Of this measure Sir R. Montgomery wrote:

"The proposal to levy this fine emanated from Mr. Rickotts himself. It met my cordial approval, and has been sanctioned by the Chief Commissioner. I consider it one of the most masterly strokes of policy of the whole Punjab. The principle is well understood by the people, that when any members of a community disgrace themselves by violent encroachments on the righte of others, the whole community to which they belong ntones for their guilt by pecuniary compensation to the sufferers, and by a fine to Government for its outraged authority. In this case it produced the most strikingly beneficial effects. It quieted not only Indhiana, but all the six market towns of the District. It inspired a salutary dread of Government, which was so manifestly inclined to hold its own and care for neither prince, peasant nor mutmeer. Compensation was made to all the sufferers to the full extent of their losses, leaving a small balanco which will nearly cover the loss to Government property."

After the display of such an animus by the rabble of Ludhiina and its neighbourhood, it was necessary to put it out of their power ever to display it again. To this end, all native houses within 300 yards of the fort were levelled, and the Gujar population turned out to the lowlands beyond the city. The Gujars of the whole district were disarmed, but not the Jats, as their subsequent co-operation with the British Government was reasonably to be expected from the good feeling they had already shown. The Gujars were also deprived of their boats, and inflated skins (for crossing the river) wore made contraband amongst thom. The low Hindustini population swarming in the old cantonment was disporsed and sent home.

Particular instances of sedition occurred besides the great obullition on June 8th. A fanatical Gújar Maulvi, after proaching sedition for some time, went off to Dolhi. One or two of the Kábul pensioners (descendants of Sháh Shúja) followed his example. The 3rd Native Infantry, before they left, were also known to be firebrands, but nothing could be proved against them. The Hindu chaudris were, as a body, timid and lukewarm in our cause. On the other hand, instances of good feeling were also manifested. Rám Singh, one of these Hindu chaudris (or headmen), was an honourable exception to his class. He was ever active in laying in supplies, and at a very critical time advanced nearly Rs. 3,000 for the public service. The Jats of the Raikot thana when informed of the mutinies at Ferozepore and Jullundun, set themselves to watch all the roads and wells with the aim of seizing stragglers. It were an

endless task to enumerate all the instances of good and bad feeling CHAP. I, B. among the people of this district. The outline here furnished will show the difficulties that the district officers had to battle with, and the energy with which they met them. The Muhammadan Gijars (1867). of the Bet are the only people who appear to have shown any disaffection, but it is in the nature of this tribe to be discontented. The Hindu Jats, who form the mass of the population, could have nothing in common with the mutineers, and were steadfastly loyal to us. Not a single instance of disturbance in any part of the district, save in the town of Ludhiana, is recorded.

The Mutiny

The only event left to chronicle is the " mad attempt " by the Kúkas in 1872. An account of the rise of this sect will be found in outbreak. the next chapter. The proceedings of Ram Singh's followers had caused anxiety to Government for many years, and special precautions were from time to time taken to provent large gatherings of them. Small disturbances occurred at the religious fairs here and there: and in 1870 "butcher" murdors were committed in one or two places, the rage of the Kúkas being directed against the killers of kine. On the 13th January 1872 there was a meeting of Kukas at Bhaini, and a gang of about 150 of these, after working themselves up into a state of religious fronzy, started off under the leadership of two Jats of Sakraundi in Patiala territory. Ram Singh informed the police of their intention to de some mischief, saying that he had no control over them, but it was considered sufficient to see them out of our turritory. They were armed with axes, sticks, &c., only, and are said to have declared that the town of Maler Kotla would be the object of their attack. They went to Pael in Patiala territory without causing any disturbance, and re-appeared next day near to Malandh, the seat of Sirdar Badan Singh, on which they made a sudden onset with the idea, probably, of getting arms and money. They are said to have wanted the Sirdir to lead them. In this attack two mon were killed on each side and a few wounded. and the gang sneceeded in scenning three herses, one gun and one sword. No one joined thom anywhere on their march, and they never numbered more than 150 men at the outside. They next proceeded to Kotla, which is nine miles distant from Malaudh, and on the morning of the 15th made a sudden attack on the palace and treasury of the Nawib; but were driven off when the Kotla guards had recovered from their surprise, and pursued to Rurr in the Patiala territory, where to the number of 68 they surrendered to the Patiala anthorities. At Malaudh and Kotla they had killed 10 men and wounded 17, while their own loss had been 9 killed and 38 wounded. On getting news of the attacks on Malaudh and Kotla, Mr. Cowan, the Deputy Commissioner of Ludhiann, started for the latter place, and telegraphed for troops, which arrived soon after. Mr. Cowan executed by blowing from guns at Kotla 49 of the captured mon, and the others were tried by the Commissioner (Mr. Forsyth) and executed on the following day. Thus ended the

The Kúka outbreak.

CHAP. I. B. Kúka outbreak of 1872. If the Kúkas over bad any plans for a rising they must have been completely upset by these insance proceedings of a small body of fanatics, rushing about the country armed with sticks and axes. The people of the villages through which they passed appear to have been scared by them, and the inhabitants of Ruir, where they were captured, deserted their houses in a body on the approach of the band. Of course Ram Singh and his doctrines were responsible for what happened; and he had become a danger to the State, as similar disturbances might be created at any time by his followers. Ram Singh was at once deported to Rangoon and remained a State prisoner till his death in 1885.

> The Fort at Ludhiána which was the last relic of the old cantonment was garrisoned until 1903 by a company of Nativo Infantry, under the command first of a British and latterly of a Native Officer. In 1903, however, it was evacuated by the troops and handed over to the Civil authorities.(1)

District Officers.

Nane.	From	То	Name,	From	To
Mr. H. Brereton Capt. Frazer Mr. P. Brereton " Fendall Thompson. " Niebet	14th June 1849 1850 1854 1854 1854 Decr. 1854 1856 1857 1867 1867 Octr. 1858 May 1892 7th March 1863	About three menths. About two months, Jany. 1854. About noe month. Juno 1856. Septr. 1857. For three months.	Mr. Thomas Tolbort Tolbort Copt. E. P. Gardon Col. E. Elliott Hawes Mr. C. W. Cowon Col. P. Maxwell Mr. C. W. Cowan Mr. C. W. Cowan G. G. Young R. T. M. Lang Maj. E. P. Gurdon Mr. G. M. Ogilvio Capt. C. E. Maopherson, Mr. G. E. Wakefield F. D. O. Bullock O. P. Bird	1867 18t April 1805 18th Octr. 1805 18th July 1870 1872 1872 1872 1872 28th Octr. 1872 1873 April 1873 April 1873 1877 1814 Angt. 1877, 1881.	Slet March 1869, 17th Octr. 1869, 17th Octr. 1869, 16th July 1870. Two months Jany, 1872. A few days. 2nd March 1872, 1872. March 1873. One munth, 31st March 1877 13th August 1877. 18th August 1877. Febru 1881.
		.1867.	, G. E. Wakefield	24th Ootr. 1881.	22nd Feby. 1887.

⁽¹⁾ See letter No. 1436 M. W., dated 19th of May 1903, from Under Socretary to Government of India, Military Department, to the Liont.-General Communiting the Forces, Public and letter No. 2017 G., dated 6th of June 1803, from Secretary to Government, Pumjab, Public Works Department, to the Superintending Engineer, 3rd Circle.

r. G. O. Walker
W. A. LeRossignol 25th June 1900 10th April 1901,
r. W. A. LeRossienol 10th Octr. 1901 26th March 1902.

The District practically assumed its present dimensions in 1850. Formation The first portion consisted of the estates belonging to Jind which and changes lapsed in 1835, on the death of Raja Sangat Singh. These estates of boundary. included Ludhiána itself and 84 villages, yielding a revenue of Rs. 98,229.

On the termination of the Sutlei campaign the whole of the Laliore and Kapurthala territories on this side of the river were confiscated, together with one-quarter of the possessions of the Nábha Rája, and the whole of those of the Ládwa chief. In 1849, on the annexation of the Punjab, the territories of the petty sirdars and confederacies, who had been under our protection since 1808, but had enjoyed a sort of independence, were incorporated in the Ludhiána District as jágirs.

From the time of the constitution of the District up to 1866, it was divided into four tahsils. Tahsils Samrala (called at one time Sarai Lashkari Khán), Ludhiána, Pakhowál and Jagráon; but in 1866 the Pakhowal Tabsil was broken up, and a few villages added to Jagraon, while most of them were attached to Ludhiana. There are now three tabsils, with head-quarters at Ludhiána, Samrála and Jagráon.

Ludhiana tahsil has a larger revenue than nearly half of the Districts in the Province, and from a glance at the map it would appear as if the grouping of the villages was very awkward, those of the Jangal lying much nearer to Jagraon than to Ludhiana. But the whole of the Malaudh pargana which includes the villages about Malaudh and also the detached ones referred to above, is, with

History.

CHAP. I.B. the exception of two or three villages assigned to other jagirdars held in jagir by the Malaudh family.

Formation of district and changes of boundary,

The four old tabsils comprised the following parganas:—

	Tshell			Pargano.		Tahsi	l.	Pargona
Ludhiána		,,,	,,,	(Umedpur, Bhartgark, Dákha, Sánahwil, Ludhiána, Núrpur,	Samrála	•••	•••	 (Utálan. { Bahlolpur. (Khanna.
Pakhowál	•••	•••	þe	(Akalgarh, Bassian.	Jagráon	•••	***	 Bhundri, Jagráon. Sidhwán. Siwaddi. Hotur.

On the abolition of Pakhowal tahsil, the parganas of Pakhowal, Gungrana and Malaudh were added to Ludhiana, and those of Akalgarh and Bassian to Jagraon.

At annexation the country was found to be divided into ilákas. or groups of villages each held by a chief; and at the Regular Settlement these were doubled up in some places, and in others preserved as separate parganas, with a very unequal result. Thus Khanna pargana contains 118 villages, and has a revenue of Rs. 1.79,969; while Umedpur has 12 villages, and pays Rs. 14,414 These parganas were retained in the last Settlement. revenue.

Antiquities,

The District has few monuments of antiquity. The notice of the Hindu period at the commencement of this chapter contains such information as is available about the mound of Simet and the ruins of Machhiwara, the only two ascertained relics of early Hindu times. There are also mounds at several other places; but they generally mark the site of a parent village from which those about have taken their origin. Thus between Gujarwal and Phollewal the mound of Najábad marks the first settlement of the Garewals. There are a number of mosques and other Muhammadan monuments, none of any great importance. The oldest and most interesting is a building resembling a mosque two miles east of Sohana. It is said to have been built by Muhammad of Ghor in 1191 A.D, as he encamped on this spot after taking Bhatinda and was told in a dream to build it. It is called Blir after a fagir who lived there in the middle of the eighteen century. The mosque of Mihr Ali Sháh in Máchhiwára was built by the lady Fateh Malik in the reign of Sikandar Lodi (1517 A.D.), and the Ganj-i-Shahidan or place of martyrs west of the same town is a disused graveyard where it is probable that those who fell in the battle of Machhiwara (1555 A. D.) were buried.

Of the five tombs at Ludhiana mentioned in Chapter IV, that of Sayyid Ali Sarmast contains a mosque dated 1570 A. D. and

History. Antiquities.

two tombs, one of which was probably built in the time of the CHAP. I, B. Tughlags; and the Khángáh of Sháh Kuth west of the Phillaur road is known to have been standing for the last 600 years. The Idgáh and the Magbara of Rai Firoz at Hatúr are said to date from the time of Humáyán, and tho Maqbaras of Husain Khán in Bahlolpur and of his son Nawab Bahadur Khan, the mosque of Barkhurdár Khán at Hatúr, and the Maqbara of Sháh Diwán at Tihára are all said to be of Akbar's time; the Magbara of Sháh Ighq also at Tihára is not dated. Under Jabángír and Sháh Jahán the high road from Delhi to Lahore was laid out with minders at every two kos; of these there are still standing one about a mile east of Ludhiana, and another some two miles further east: one near Sahnewal, one near the sarai of Lashkari Khan and one near Rajpútan: they are all in good preservation.

Of the royal sarais which were established every sixth or seventh kos, that at Ludhiana has long since disappeared, that at Doraha is in Patiála territory, while that of Lashkari Khán, about seven miles on this side of Khanna, is a magnificent building in very good preservation. The inscription tells us that it was built by Lashkari Khán in the reign of Aurangzeb. It is now seldom used by travellers since the Railway was opened. The sarai at Khanna is now part of the town; but the walls are entire. There are a large number of mosques and tombs of Shah Jahan's time, especially at Bahlolpur where there are no less than five, of which, the Magbara of Alawal Khán Súbadár of the Dekkhan, and the bungalow of Námdár Khán are the most interesting. Also belonging to Shah Jahan's reign are the mosque of Azmat Khan at Hatur, and that of Rahson. The Lashkari sarai above mentioned, and the Shaikhonwili mosque at Ludhiana, belong to the time of Aurangzob. Among the later or undated Muhammadan monuments may be noticed the shrino of Sulaimán Sháh Chishti at Ludhiána.

There are few Hindu temples of interest. The oldest is the math of Nikka Mal at Hatúr which was in existence in the reign of Humáyún: there is a templo of Múri Guga at Chhapár, built at the beginning of the nineteenth century, where a great fair is held annually.

There are the remains of Sikh forts at Lalton, 7 miles southeast of Ludhiána, and at Ganjrána, 15 miles south of Ludhiána. Thero is a Sikh temple at Múchhiwára, the Gurudwára of the Guru Sahib, built by Sodhi Karm Singh to commemorate a visit of Guru Govind Singh; the palace of the Sodhis at Machhiwara is now quite a ruin. The ruinod báoli at Kanech, which is said to have possossed several underground rooms (tahkhana), is also a relic of the Sikhs. Anothor building commemorative of a visit of Govind Singh is the Gurudwara at Lamma.

CHAP. I, C.

Section C .- Population.

Population. Dennity. Part B.

Owing to the absence of hills or large areas of unculturable waste Ludhiána stauds high among the Districts of the Punjab in respect of density of total population on total area, there being 463 souls to the square mile, and this figure is only exceeded by five Districts. But in its density on the cultivated area Ludhiana only stands 12th, with 560 persons to the square mile of cultivation, among the Punjab Districts. Excluding the population of the towns, the pressure of the rural population also is not high, and it stands 14th in the list with only 488 persons to the square mile of cultivation and 458 to the square mile of culturable area.

Density by Tahaile.

The pop	ulation ar	id density
Tahvil.	Population 1901.	Density.
Samrála	154,995	532 6
Ludhiána	833,337	488
Jagráon	184,765	4431

of each Tahsil is shown in the margin, the density being that of the total population on the total area. It will be seen that Samrála is far more densely populated than the rest of the District, and it is one of the twenty most densely populated Tabsils in the Province, in spite

of a decrease of fourteen persons to the square mile since 1891.

In this connection the following remarks of the Settlement Collector written in 1883 are still of interest:-

Density. Walter, S. R., 6 41.

"The number of persons per square mile is 450 on total area Gordon and 543 on cultivation (1.1 acres of cultivation a head), these averages being worked out on the area as surveyed in 1879-80 and the Census of 1881. But the bare figures give us no information on the point which is of greatest importance, the pressure of population on the land; and we are driven to consider that constantly recurring problem of the classification, with a view to determine what proportion actually depends on agriculture. I have set down the urban population at 83,052; but in the case of each of the towns there is a large area attached and belonging to residents. Thus the area of Raikot is larger than that of any village in the District except one; and it would have, if there were no town, a village population of 4,000 to 5,000. So, too, Ludhiána and Jagraon havo a number of separate villago areas attached to them, the agricultural population living inside the towns. I calculate that the town population proper does certainly not exceed 60,000. We are then left with a rural population of 558,835; but this does not put us far on our way. Combination of occupations is the rule amongst the non-proprietary population, and the recent Census could soarcely have been expected to give us a classification that could be relied on to show how much of this rural population should be set down as depending on agriculture, and how much on trade and manufacture. Indeed, such an arrangement is not possible with a

Density.

society so constituted as that we have to deal with here. The CHAP. I.C. whole rural population may be said in a sense to be supported by opulation. the land, each village being for most purposes a separate community. All the implements of agriculture, the materials and furniture of the houses, with most of the ordinary clothing, are produced in the village; and only a few articles of luxury, such as brass-dishes. wedding clothes, &c., are purchased in the towns. The occupations of the various classes in the villages hang together, so that they cannot well be separated. Thus the mouial classes (tarkhán, lohar; chamar) are really the servants of the cultivator, helping him in his work by making and repairing his implements, and receiving as their wages a share of the produce. They do little work for ontsiders; and they very often combine with their hereditary occupation that of agriculture. Even the shop-keepers, who are not a numerous class in most villages, and occupy a very inferior position, being mostly of the lun tel bechná class (selfers of salt and oil), are only assistants to the cultivators, supplying them with salt and such necessaries as they cannot grow or make for themselves. We might say that the whole population, after deducting that proporly belonging to the towns and subsisting by manufactures and industries quite separate from agriculture, depends on the soil; and I think that any attempt to determine what proportion of it is supported solely by agriculture must be mere conjecture. The density of the rural population calculated in this manner is 490 per square mile of cultivation, or 1.3 acres cultivated per head. It varies greatly, as was to be expected, according to the agriculture of the District. Thus in the rich Samrala Bet, where the soil is very fertile and much of it yields two crops in the year, the incidence is 600; and in the Upper Dhiia Circle of the same tabsil. where 40 per cent. of the cultivation is irrigated, it is 660; while

Porsons per square Assessment Circle. mile cultirated. Bot Samrala 600 Upper Uháia Samrála 600 Pawadh Ludhiana C30

in the sandy Lower Dhuia tract, just over the Bet, it is only 467; and in the Jangal Circle of Ludhinna, with a rainfall of 17 inches and no irrigation, it is 318. The details of the three most thickly populated tracts

of the District are shown in the margin.

"These proportions are as high as in most of the highly cultivated tracts of the Province, although they are much below those of some parts of Hoshiarpur and Jullundur. Thoro can be no doubt that in places there is to some extent a pressure of population, especially in the tracts named and in the eastern parts of Ludhiána Tahsil Bet and uplands. This pressure is not universal, but shows itself in the older and larger villages where the process of subdivision of land has been going on longest. It is just in these very tracts where the cultivation is most elaborate, that the people are most tied down to their villages. Vory few men of CHAP. I.C. Population. Density.

the Samrála Tahsil will be found in service. From his birth the agriculturist is bound to the land, which requires his every hour; and the last thing he thinks of is seeking employment of any other sort. There is no emigration to speak of, and the direction in which the excess tries to find an outlet is botter cultivation and the spread of irrigation. But for the latter of these capital is required, and this is what the cultivator does not possess.

"As for distribution by houses and families, the custom in the villages is for each family to have a separate house, and it is very seldom that a house contains more than one family. An agriculturist, when he marries almost invariably sets up a separate house, and this is the practice amongst most non-agriculturists resident in villages. The town returns show two families to each house, at all events in the city of Ludhiána. This is probably due to various causes, e.a., a whole serai being counted as one house. The poorer classes in cities are also in the habit of living several families together in one house."

Towns. Table 7 of Part B,

Ráikat

Máchhiwára Khanna

The District contains 5 towns and 864 villages, and the Population 1901. Town. Ladhiána 48,649 18,760 10,181 Jagraon ••

5,588

8,538

population of the former is given in the margin. At the Census of 1901 all the towns showed an increase of population, except Khanna which had a nominal decrease of 39, on the figures of 1891. Even the unhealthy town of Máchhiwára had an increase of 248 souls. Only 13 per cent. of the population live in the towns.

The villages. Walker, S. R. § 67.

The average population of the village in this District is large, being 678 souls. The villages are generally built of sun-dried bricks, but in most will be found one or two houses of masonry. In the ordinary Jat villages the houses are huddled together and open into narrow bye lanes, which after a dirty and tortuous course join the main thoroughfares. The lanes are seldom more than four or five feet wide. The only entrance to the village is by one or more gates whose number depends on the size of the village. All the people live inside except the chamárs or other outcastes, who are admitted, and have their houses at a little distance apart or round the site, facing outwards.

Village gates.

The gates are the property either of the whole village or of a subdivision of it (patti or thula), each subdivision having in this case its own. The form is the same in all cases. On each side of the roadway to a distance of twenty or thirty feet a mud platform, four or five feet in height is raised, and on these are verandahs closed on three sides, but open with pillars towards the road. The whole is rooted in (the verandahs and the roadway between them) and a very comfortable place of shelter formed, in which travellers rest and the people meet in the evening. There is sometimes very great

PART A.

elaboration in these gates, and the different pattis will vie with CHAP. I. C. each other in architectural display. The style of gate is very Population. often a safe test of the condition of a village, but there are few village gates. now that have not towards the outside an arch of masonry work, covered with some sort of ornamental design. In a great many villages the gate is a most commodious structure of solid masonry, which would cost in many cases a single patti as much as Rs. 1,000; but everything, including labour, is generally subscribed, wood for beams, cowdung for burning lime, etc., and the only actual expenditure is on the pay of masons. It is on these gates principally that the architectural genius of the villages shows itself. The Settlement Officer says he has often found shelter from a storm in a village gate amidst a crowd of natives, villagers and travellers, collected with the same object.

The interior of a village is, as a rule, fairly clean; it is ontside Surroundings that the filth collects. In the eastern parts the cultivated fields of a village. como to within a few yards of the houses, leaving very little vacant space. Round the sito is the usual road, and outside of this are generally small hedged enclosures (waru or gohru) in which the manuro heaps are kept, and the women make the cowdung fuel. These enclosures may lie together in a piece of the goera or waste land adjoining the site, or they may be between the fields and the road. Sometimes a proprietor is reluctantly compelled to devote a few square yards to this purpose The village ponds (toba) are the oxcavations from which the clay for building the village have been dug out. They are used for purposes of ablution and for watering the cattle. The drinking wells are generally inside the village. If a few pipal trees about the pond be added, we have a complete statement of the surroundings of an ordinary village of the uplands in Samrála and eastern Ludhiána. These eastern villages are, as a rule, of average size; but the west and especially in the Jagraon Tahsil along the Ferozepore border, western viland in the Jangal, the villages are much larger, and the houses more spread out, land not boing so valuable. Enclosures for cattle and cowdung fuel are thrown out all round, the lanes are much wider, and there is generally plenty of room round the site. The Muhammadan villages of the Bet are generally smaller than those of the Dhaia, and the sites are more open and straggling. dan villages There are no gates, and entrance is possible at almost any point. The takin takes the place of the gate in the Dhaia. This is situated outside the villago, generally under the shade of a pilkhún tree and consists of a couple of rooms, built on one side of a mud platform three or four feet high. Travellers rest here; and above all the lukka is kept going. The takia is in charge of a fagir whose principal duty is to guard the hukka and keep it alight. A rude mosque is often attached to the tukin; and, if there is not one, the people pray in the tukia itself. There is generally plenty of room round a Bet village, the land adjoining the site being

1881

1891

CHAP. I.C. often uncultivated; and the waras or enclosures are larger than Population. in the Dhaia.

Growth of population.
Table 6 of 1868 Part B.

The population of the last four censuses is given in the margin. From 1881—1891 the increase was 29,887 or 585,547 4.8 per cent. From 1891—1901 it was 24,375 618,835 *** 648,722 or 8.8 per cent., and in the twenty years ... 673,097

1901 1881—1901, 54,262 or 8.7 per cent. Taking the last decade it is noticeable that the increase is chiefly in the rural areas which claim 20,457 of the additional population, when we consider the increase by Tahsils we find a striking contrast between Jagraon and Samrala. The former increased by 17,119 persons, while Samrala decreased by 3,984. Ladhiana Tahsil shows an increase of 7,322. These figures are explained in the case of Jagraon by the increase in canal irrigation, and in Samrala partly by the emigration which its absence has produced, but still more by the epidemics of fever which have ravaged the population of its malarious riverain tract.

The marginal table shows the fluctuations in the population of

-						each Tahsil
	Tota	L POPULA	rion.	Percent Incri	PAGE OF	since 1881. In 1901 the
Tansil.	188).	1801.	1901.	1891 on 1681	1901 on 1891	figures of Ludhiána Tahsil ex-
Total for the District	618,835	048,722	678,097	+4'8	+3.8	cluding the town of
Ludhiána	307,550	323,700	333,337	+ 5.2	+2.0	Ludhiána
Jagráon	158,767	166,252	184,765	+47	+un	only showed an increase
Samrala	152,509	158,770	154,995	+*1	-2.4	of 2.6 per
						cent there

having been a decrease in the Bet, where the soil is hard and has deteriorated since Settlement, though the falling off is far less marked and general than in the Samrála Bet which is notoriously unhealthy, the falling off in population becoming more and more marked as one approaches its eastern extremity. The result is that in spite of a slight increase in the urban population, Tahsil Samrála showed a decrease of 2.4 per cent. in the population of 1891. In Jagraon the increase of over 11 per cent. in 1901 was virtually confined to the rural population.

Growth of populotion. Gordon Walker, S. R.,

5 40.

The increase of population in 1881 was thus discussed by Mr. Gordon Walker:-

"Taking the Census figures as correct, we find that there has been a steady increase, which amounted to 11 per cent, in the first thirteen years and to half that proportion in the next thirteen, the rate of increase having been the same in the towns as in the rural population. No eafe conclusions can of course be drawn from the figures alone without consideration of the oircumstances of the district at the various periods, and these I will CHAP. I, C. When we annexed the country after the Sutley Population. proceed to notice. campaign of 1845 we found it very fairly cultivated; for our predecessors, the Sikhs, had done their best to increase their revenues by encouraging agriculture; and all the States and chiefe were under our own protection population. or that of Lahore. Petty feuds were ancommon, and there was general peace. But the Sikh revenue system was what we should call oppressive; and the rule of some of the chiefs was a mixture of tyranny and rapacity. Property in land was considered a burden, which often under a bad ruler became too heavy to be borne; and society must have been in an unsettled state owing to the frequent changes of rulers. In the same way there was a certain amount of trade; but it was checked by the transit duties levied at short distances by each independent obief, and by the general lawlessness. With our rule came perfect security to the husbandman and to the trader; and an immediate development of the resources of the country by the protection afforded to life and property and the opening out of communications. The increase in cultivation must have been very great in the few years that followed the Summary Settlement of 1847; but there are no details to show what it was. When the survey for the Regular Settlement was made in 1850-52 it was found that there was a proportion of 84 acres cultivated in each 100 acres of arable area; and a great part of what remained was brought under the plough within a short time after. Perhaps the best proof of the development of agriculture is the immense fall in prices between 1850 and 1860. The raler had before that left the peasant just enough to live on, and had taken most of his dues in kind; while the latter know that the more he cultivated the more he would have to pny, and he had probably as much land under the plough as he could manage. The effects on the population of the development of resources that followed the introduction of our rule would take some time to show thomselves, and would naturally appear between 1855 and 1868. There was not room for immigration on a large scale, the whole land being owned by the villages; and there was no tendency for settlers to come from any neighbouring district, for the whole country was in much the same condition. The increase of population was all inside the district. The margin of extension has long ago been filled up, the proportion of culturable to cultivated being now one in ten; and the prudential check on population has to some extent come into effect. There has been everywhere a subdivision of holdings, and in most parts of the district the scarcity of land has made itself felt. At all events amongst the Jats and Rajputs every man does not now marry as a matter of course, really I believe on account of the immediate expense; and in most families will be found one or two men who have remained single. It is undoubtedly the case that a state of things equivalent to polynndry provails amongst the Jats, though it is not recognised as an institution: and the rosalt is a distinct check on population. The Sirhind Canal has just been opened, and the productive power of a large part of the district will thereby be increased. The portions affected by it are those in which the population is now lenst dense; and it will be necessary for the present cultivators to call in others to their aid. But the whole of the land bere also belongs to villages, and is mostly cultivated: and it is hard to say what the process of immigration will be, and whence the settlers will come. I doubt if the result will be to relieve the more thickly populated parts of this district of their surplus population. Except for this opening I should be inclined to say that the population of the district had arrived at the stationary stage, and that the rate of increase in the future would be at all events much smaller than in the past."

Growth of

CHAP. I, C. Population.

The following table shows the effect of migration on the population of the Ludhiana District according to the Census of 1901:—

Migratico. Tables 8 and 9 of Part B.

	Persons,	Males,	Females.
	1		
Inmorants,			
I. From within the Project and North-West Frontier	100,872	35,979	78,893
II. From the rest of India	4,184 170 460	2,574 114 435	1,610 56 25
1v. From other chaptries	100	1	-
Total immigrants	114,686	39,102	75,584
Emigrants,			
I. To within the Ponjab and North-West Frontier Province.	127,788	53,430	74,958
II. To the rest of ladia	8,423	2,527	896
Fotal emigrants Excess + and defect - of immigrants over emigrants	181,211 -16,525	55,957 -16,855	75,254 +330

The bulk of the immigration is from the Districts, States and Pro-

vinces in In-Number of males in 1,000 immigrants. Totalimmi-grants. dia noted in o t a l immi-grants. the margin. There is also a considerable volume 1,831 8,688 5,963 Hissár Patiála 40,428 of immigra-10,772 1,224 Ambála 383 Nábha 237 ••• tion from Husbiárpur Rájpúlána with Ajmer Merwárn. 536 561 414 253 Jallandar 14,470 the coun-Maler Kotla ... United Provinces of 2,358 646 8.327 tries outside Ferozepore Agra and Oudh, India.

The emigration is mainly to the Districts and States noted in the margin.

	=						
			Malee.	Females.		Malos.	Females.
Ambála		,	2,585	4,985	Nábha	3,497	0,297
Hushiarpur			921	2,209	Lahore	1,241	830
Jollundur			3,440	8,349	Amritsar	748	738
Kapárthala		***	534	1,104	Chenáb Colnny	11,500	
Maler Kotla	***	***	1,959		Réiphtána with Ajmor	220	86
Ferozapore			8,438	14,168			
Faridkot		***	1,218			1,200	580
Patiála			10,059	21,136	Agra and Oodb,		
	_			i			

The District thus loses 16,525 souls by migration, and its not CHAP. I. C.

Net gain f	rom -	i or le	999 t	:0	Net gain from + or l	ose to-	interchanges of population
Hissår Aæbála Hoshiårpur Jollandur Kapürthala Máler Kotla Ferozepore Fariákot Patiála			-	537 1,118 2,833 2,690 793 2,051 10,001 1,503 9,233	Nabha	+ 978 - 1,642 - 17,705 - 726 + 918 + 563	with the Districts, States and Provinces in India which mainly affect its popula-

Population.

Migration.

tion are noted in the margin.

Comparison with the figures of 1891 shows that Ludhiána lost

Gain or lass vincial <i>t</i>		1901.	1801.		
Ohenáb Colany		Total		-17,916 -17,607	-4,573
Patiúla		•••		+9,233 +2,051	+5,127 +2,083
Ferozeporo	•••	***		-10,001	- 9,160

by intra-Provincial migration alone 17,916 souls in 1901, or 13,343 more than in 1891.

we have the marginal data.

Taking the figures for intra-Imperial migration, i.e., those for migration in India both within the Punjab and to or from other Provinces in India,

Loss by intra-lm migration.	perial		1901.
Totai	***	. ""	-17,155

These figures may be summed up by saying that the main trend of emigration is to Ferozepore, while the chief source of immigration is Patiala—the net result to the District by intra-Imperial migration being a loss of 17,155 persons.

The following remarks on the migration to and from the District are taken from the Consus Report of 1881:—

"Ludhiána, with its extensivo riversin, occupies an intermediate position between the thickly peopled submontane districts in the north and the irrigated plains to the south. From over-erowded Ambála, Jullandar and Hoshiárpur, it receives surplus population, while it attracts immigrants from the central States which lie to its south. On the other hand, the rapid extension of canal irrigation in Lahore, Amritsar and Ferozepore has attracted a large emigration to those districts. Much of the emigration in the case of Ferozepore, Ambála and Jullandur, and almost all the emigration to Hoshiárpur, is of the reciprocal type, while in the case of the Native States no less than seven-tenths of the migrants are women. The Kashmír colony in the tows of Ludhiána does not appear to have been recruited to any considerable extent during the lifetime of the present generation."

Ages.

CHAP. I. C. Migration.

To a large extent these remarks hold good after 20 years. Population Jullundur, Hoshiárpur, and Ambála still send large contingents. but they are dwarfed by the 40,000 immigrants returned from Patiála. The increase of canal cultivation in this as in other Districts is the dominant factor in determining the movements of the population, while in this District recruiting for the native army, and especially the 15th (Ludhiána) Sikhs, draws off a large number of superfluous men. It is worth noting that the immigration of Kashmiris to this District has entirely ceased. In fact those of them. who are left in Ludhiána are in such straits for employment that they are practically dependent on the charity of two or three wealthy Kashmiris in the town.

Ages. Table 10 of Part B.

The value of age statistics in India is discounted by their uncertainty and their value rapidly diminishes as the numbers dealt with become smaller. The following figures show the distribution by age of every 10,000 of the population according to the Census of 1901:--

Age period,	Males.	Femules.	Persons.	Age period,	Males.	Females.	Региопя.
Infants nuder 1 1 and under 2 2 " 3 3 " 4 4 " 5 5 " 10 10 " 15 15 " 20 20 " 25	 170 94 128 127 186 709 676 527 440	145 78 90 105 110 565 500 380 365	315 172 227 232 246 1,274 1,176 907 691	25 and under 30 30 , , , 35 35 , , , 40 40 , , , 45 45 , , , 50 50 , , , 55 60 , , over	429 399 207 363 220 268 123 372	379 358 270 329 176 242 51 312	808 757 567 692 396 510 205 684

In the uplands the conditions are very favourable to longevity, the climate good and the habits of the people (Hindú Jats mostly) very temperate. There is a little fever every year in the autumn, but the effects of this generally pass away at once. In the lowlands the climate is bad and fever almost universal for two or three months every year. These different conditions result in longevity in the uplands, while in the Bet the constitutions of most people are undermined by annual attacks of fever, and they seldom live to a great age. I do not think that religion or the habits of the people do much to produce this result; but, as already observed, nearly the whole population of the Bet is Muhammadan and of the uplands Hindú. Comparing Sikhs and Muhammadans we find-

	Upwards of 60.	TOTAL,
Hindús	18,042	269,076
Sikhr	12,907	164,919
Mahammadans	14,955	235,937

Vital statistics.

PART A.

so that the proportion of persons living more than 60 years is CHAP. I. C. greater amongst the former than amongst the latter. These Population remarks apply to the villages.

Both the birth-rate and death-rate of the District are normal.

RATE per mille.

	Hindus.		MUHAMMA- DANK,		ALL RELIGIONS,		
YEARS.	Malos.	Females.	Males.	Fomalce.	Males.	Females.	Both Sexes.
1828 1839 1900 1901 1902	22 7 26 4 22 7 18 8 10 2	20·3 24·8 21·4 17·8 18·1	21·5 27·5 24·5 16·6 18·3	20°3 23°8 23°3 15°8 17°5	223 267 233 181 189	20 3 25 0 22 1 17 L 17 2	42.6 51.8 45.4 35.2 36.2
Quinquon- nial aver- age.	21.4	20.4	21.0	10.0	21.8	20.0	41'3

The last quinquennial Tables 11-13 average was 27,815 of Part B. births, or 41.3 per birth-rates. mille of the population. The highest number recorded was in 1899, viz., 33,584, and the lowest in 1901, viz., 23,672. The marginal table shows figures by religion The quinand sex. quennial average for 1898—1902 was thus 41.3 for both sexes. but the male birth-

and 1901 was due to malarial fevers; that of 1902 to bubonic plague. The mortality of the latter year was notorious, 69,915 people, or more than ten per cent. of the total population having died. The quin-

rate was 21.3 as against 20~per~mille for females.

The death-rates for the past five years are given in the margin. The high rate in 1900 death-rates.

Averego

		,, ,	ALL RELIGIONS.			
YEARS.	Hindús.	Muham- madans,	Males.	Females.	Both sexes.	
1899 1899 1900 1901 1902	32·5 31·8 58·2 52· 101·7	31'9 28'1 64'6 52'8 108'2	29·2 26·4 54·7 47·9 90·4	36·0 35·5 67·3 57·5 120·3	32·3 31·6 60·4 52·2 103·0	
Qainquonnial uverage	54.6	50.4	49'2	62.4	55.2	

quennial average of deaths for the past five years was 37,141 or 55.2 per mille (49.2

Average of death-rate in the 6-year period, 1898-1902.

Age-p eriod.	Males.	Fomales.		
0-1	10°9	14°0		
1-5	9°0	10°1		
5-10	2°8	3°6		
All ages	43°2	62°4		

for males and 62.4 for females) of the population. This excessive female mortality is a very marked feature of the earlier age-periods as the marginal figures show. The average excess of births over deaths in the District between 1891 and 1901 was 5,019 persons, giving a total of 50,191 for the decade. difference between this figure and the actual increase shown by the Census of 1901 was 25,816, which represents the net loss to the District by migration.

CHAP. I, C.

Average desth-rates.

The birth-rate of the District is slightly above that of the Population. Province. The figures per mille for the five years ending 1900 are given below:-

			1896.	1807.	1898.	1899.	1900,
Provinco Ludbiána			43°0 45°3	42°6	41 [.] 0	48'4 51'8	41 ⁻¹ 454

The death-rate is also higher than the Provincial; the figures are:-

		1806,	1807.	1898,	1890.	1900,
Province Ludbiáca	111	 31.23 31.23	91:05 34:7	31·05 32·3	29'57 · 31'6	47°69 60°4

Favers.

The Bet is very malarious and from Angust to November fever is very prevalent. In a bad year one can scarcely find in October an able-bodied man who is not suffering from it: 1892 and 1900 were exceptionally bad years. In 1900 there were 26,861 deaths from fever and in 1892, 20,653. The annual average for the decade 1891—1900 was 14,810 deaths from fever alone. Malarial cachexia is also found but is not common. The severity of the attacks of fever varies largely, but the general result is a weakening of the constitution which makes the people less able to resist other ailments. The civil station is malarious in the autumn months, but even a few miles' journey inland seems to give comparative immunity. The most healthy part of the District is the south-west corner about Bassian and the Jangal village where the climate is always dry and the water much purer.

Small-pox.

Small-pox breaks out from time to time. In 1896 it occurred in epidemic form and 2,383 deaths from it are recorded in that year. Small-pox is generally responsible for 100 to 300 deaths annually. It has decreased considerably since the introduction of vaccination.

Cholera.

Cholera did not visit the District between 1872 and 1891, but in 1891 it carried off 1,000 persons, in 1892, 1,843, and in 1900, 437.

Otherdiseases

Other diseases of the bowels and of the spleen, largely caused by malarious conditions, are common. Pneumonia too claims its toll in the winter.

Plague.

Plague first appeared in the District in 1900-01 when there were 34 cases and 28 deaths. In the following year plague spread tremendously owing to the withdrawal of the cordon. Ludhiána CHAP. I. C. returned 65,364 cases and 48,016 deaths. In 1902-03, however, Population. the numbers dropped again as suddenly and the figures were 8,048 cases and 4,930 deaths. 1903-04 saw a general reduction in the Punjab plague figures. Ludhiána, however, had more cases than any other District. An inoculating staff was at work during 1902-03 and 16,040 inoculations were performed.

On the subject of plague the Civil Surgeon writing in 1904 said :-

"The attitude of the people towards plague precautions is one of indifference on the whole. Innculation is absolutely refused. Chemical disinfection is seldom asked for, but I have frequent applications for desicention by stores, which appeals to the people mainly, I think, because it can be carried out with little inconvenience to the occupants of infected houses and without any wholesslo removal of property. The most astonishing feature to my mind is the indifference with which non-infected villages and towns permit people flying from infected areas to enter their borders. I must add, however, that a great deal depends upon the personal influence of leaders of communities and in certain cases lately mildies of enlightenmont and influence have been instrumental in getting villages to evacuate and carry out desiccation on a large scale. I have noticed also that certain villages infected in former years have, partially or completely, evacuated of their own accord on the renppearance of the disease this season and doubtless in time, the people will find from experience that their only safety lies in this measure. It seems to me that the difficulty in towns is due to a want of collesion between leading men. Individually members of communities and influential persons will be most desirous of adopting suitable measures, but each one is afraid to take the initiative lest he should get into disfavour or his action be deliberately misconstrued by his enemies and any organized attempt to cope with the matter is doomed to fail, so that one feels much in the same position as a potter trying to mould a vessel with dry clay."

The following statement shows the effect of plague on the population of the District:—

Population on March 1st, 1901	•••	***	678,097
Add:—			
Births in 1901 (March 1st to cad of year) " " 1902 " " 1908	19,656 24,714 28,752		
Total	73,122		78,122 746,219
Deaths in 1901 (March 1st to end of year) " " 1902 " 1903	31,323 69,915 36,972		
Population on January 1st, 1904	138,210		189,210 608,009

It will be seen that since the Consus was taken the population has decreased by 65,088 souls and this is nearly all due to bubonic CHAP. I. C. plague, though the recorded deaths from plague were only 56,897. Population. since it broke out in the District.

Native treatment of diseases.

The Civil Surgeon writes: "quack" methods of treatment are common among the villagers. As soon as a man falls sick the nearest quack is sent for. For fever he will generally first prescribe a strong purgative, with strong directions for abstinence from food. The treatment of fever for a strong or a weak man is the same. Purgative medicines are obtained from the nearest Attar, i.e., the native druggist's shop. They consist mostly of a mixture of senna, cassia pods, fennel, rose leaves, figs, tamarind and sugar, all boiled in water and strained through muslin. A glassful is given as a dose. Constitutional diseases are generally treated by drastic purgatives, e.g., croton, the seeds of which are made into pills. The common medicine for diarrhea and dysentery is opium. For coughs, liquorice root is given. Honey with pipal rubbed into a paste is also a very popular remedy. Contusions are treated by local application of haldi and hot fomentations. Contused and lacerated wounds are treated by stopping them with burnt silk.

All eye-diseases from simple conjunctivitis and pan-ophthalmitis are treated alike. A common paint for the eyes is a paste made of a mixture of opium, alum, and rasaut, i.e., an impure watery extract of berberis. Another remedy is metallic zinc which is exidized and rubbed with a small piece of pipal, pulverised and applied to the lids as surma. Alum is also used for conjunctivitis. Buboes, large boils, whitlow, local inflammation, &c., are cauterized. The milky juice of the ak (calatropis indica) is obtained by breaking twigs and leaves, and collected in a small cup of wheaten dough. This is applied over the part to be canterized and bandaged on. For toothache the common remedy is akarkara (pebliton root) which when chewed relieves the pain. Bad teeth are extracted by the barber. For ear-ache some opium is rubbed up with oil and dropped into the patient's ear. When a man suffers from delirium or mania or a woman from hysteria it is thought that the person so affected is possessed by a demon or evil spirit and charms and magic are resorted to. Certain men are supposed to practise exorcism and these are sent for. A very common method is to burn red chillies and allow the smoke to be inhaled by the person possessed. This in many hysterical cases has a beneficial effect. Bone-setters are common in towns and large villages. For dislocation and simple fractures people generally go to them first. It is not uncommon to come across cases where from tight bandaging actual gangrene has set in, frequently resulting in the death of the patient.

Customs con-

The ceremonies observed on the birth of a child by the Hindú portion of the agricultural population are as follows:-When the Hindas and midwife is called in, she ties a branch of the siris tree, and an iron Gordon Wal. ring over the door to notify the birth, and also to keep away evil ker, S.R., \$ 76. spirits. If a son is born, the father goes at once and informs the

pádha or priest, and inquires whether the time is auspicious or not. CHAP. I, C. If it is not, the father must make offerings to the Brahmans. In Population. cases of the worst combination of stars, called gand mul, the child constant in former times was thrown out to perish, as it was believed that nected with something would happen to the parents if they kept it. The birth.
Hindús and mother is kept close in the house for 13 days after the birth, when sikhs. the padha is called and gives a name to the child, on which occasion he receives Re.1, and the parohit and others something. Brahmans, fagirs and the neighbours are also fed, and sweetmeats distributed, considerable expense being incurred. This is in token of the purification, that the sútak or impurity is removed from the house. For a further period up to 40 days the mother does not mix with the rest of the people, only with her relations. None of these ceremonials are observed by the Jats in the case of a girl, except that sútak is kept. A Hindú child has no further ceremony by way of baptism, &c., to go through. A Sikh generally takes the palul when he has arrived at years of discretion. The whole of these ceremonies are not strictly observed by the agricultural portion of the community. The name is given to a son in the case of a Sikh by opening the Granth Sahib and taking the first letter of the page. Other Hindú Jats do not, as a rule, ask the Bráhman pádha for a name, but give one themselves or ask the bharái. The period of 40 days' seclusion (called chilla) is not kept unless for some special reason.

Amongst the Muhammadans when a son is born the quei or Whammamullah (priest) comes on the first to the third day and recites the dans. báng or creed in the child's ear, and it receives a name from the priest or from some respectable relative.

There is little that is peculiar in the birth ceremonies observed by Muhammadans in this District. A woman generally goes to her father's house for her first confinement and on the birth of the child messages, congratulatory or otherwise according as the child is a boy or girl, pass between her parents and her husband's parents. The messengers and the midwife are rewarded on a customary scale. The young mother remains for 5 or 6 months in her father's house. After confinement the woman is secluded for three days only. On the evening of the third day she goes towards the door, where she can see the sky and the stars, accompanied by a boy of the family who has a phala over his shoulders and a whip in his hand. The termination of the period of impurity is marked by a fast (agiga) minnat, or vows made with the object of obtaining Divine protection for the child are frequent and diverse. A child is made to wear a silver hashi of two or three tolas' weight, changing the hasli every year up to the age of 12. Then all the haslis are sold and the money used in feeding the poor. This is called badhawa. Another method is to shave half the head one week and the other

⁽¹⁾ Materials for this note were supplied by Ghulam Mohi-ud-din, Honorary Magistrate. Ludbiána.

CHAP. I, C. half the next. Another is to make the boy work as messenger to Population, an imam during the first ten days of mohurram. For this purpose he wears a special dress of black and green muslin, and feathers in his turban. These customs are more common in cities than in villages. In Jagraon and the Jangal tracts the forms of minuat observed by Muhammadans approximate rather to those of Sikhs and Hindús.

Sex.

Circumcision (sunnat or suntán) is a ceremony of equal importance with marriage. It is performed at any time before the age of 12 in the presence of the baradari. A child who is born circumcised is called rasúlia.

The number of males in every 10,000 of both sexes is shown Table 16 of below :-Part B.

		Cen	ue.				In villages.	In towes,	Total.
	1868 1881 1891	411 1111	***	***	***	111	5,492 5,478	5,459 5,380	5,475 5,488 5,463 5,485
Oensas of	1901	Diodús Síkhs	100	***	•••		5,500 5,571	5,885 5,560	5,485 5,570 5,533
Oensus or	1501	Muhamm	adavs	***	***	***	5,527 5,369	5,849 5,267	6,346

The proportions of the sexes at birth have already been noticed

FRMALES PER 1,000 MALES BY THE CENSUS 1901.

Year of life,	All reli- gions,	Hindús.	Sikhs.	Mubam madaus
				ļ
01	856	872	766	898
1-2	837	844	761	890
2-3	773	745	704	859
8-4	826	819	737	894
45	803	784	765	852
Total 0.5	820	814	747	879
All ages.	823	795	807	870

under Vital Statistics. In spite of the preponderance of male births the female infant mortal. ity is so heavy that the number under 5 is less than nine-tenths of the number of boys, as the marginal table shows; and among Sikhs the proportion is only three fourths. Indeed these data rather over-estimate the number of girls among the Sikhs, many boys in Sikh

families having been returned as Hindús because they had not taken palul, while all the girls were returned as a matter of course as Sikhs.

In later life the proportion of females to males is higher among the Sikhs, but lower in the case of the other two main religions. This is almost undoubtedly due to the excess of the female over the male death-rate already noticed. The result is that there are according to the Census returns of 1881, 1891 and 1901. only 45 females to 55 males in the District. As elsewhere the ratio of females to males is somewhat higher in the villages than it is in the towns, but the difference is very slight.

Betrothal.

PART A.

The pr	op	ortions	of the	sexes var
	_	FENALES	PER 1,00	O NALFS.
	٠	Infants under 1.	Children under 5	All ages.
s amadans igions		872 766 898 856	814 747 879 820	795 807 870 823

y in the different religions, but CHAP. I. C. Muhammadans have a fairly Population. high ratio at all ages, as compared with Hindús or Sikhs. The latter have a very low proportion (less than 75 per cent.) of female children under 5, and in each religion the ratio is worse in that than in the 0—1 age-period. Indeed the Hindús and Muhammadans

a steady decrease in the proportion of females as ages ase, and the Sikhs probably only improve their ratio because ú women are married into their families.

	Jat females per 1,000 males.									
	0.5.	5-12,	All ages.							
•••	745 730	679 720	727 826							

Among the Jats the figures are still more curious. Here the ratio of females to males is at its lowest in the 5-12 age-period, especially among the Hindú When the figures Jats. ny Jat tribes are taken the deficiency becomes even more marked

in certain cases, as the marginal instances show. In the Garewal villages of 'Darbári' status, viz., Raipur and Gujarwál, the ratios are still worse. Natangwál is also bad, and so is the Gil village of Gil.

FEMALES PER 1,000 MALES. Tribe. ge 0—6. Oil. Garewál. Dháriwál. 687 724 621 540 621 678

ld's life is its betrothal. There are now amongst the Hindú tion. two forms of betrothal—where moncy is taken by the girl's Part B. le, and where it is not (pun). The latter is the only pure The girl's parents generally make inquiries beforehand and Hindés. n some family with whom they should like an alliance, and in Gordon walker, S. R. h.there is a boy suitable, the only restriction being that the 577. y does not belong to four gots, with which the parents are dy connected The Nái or Bráhman of the family $(l \acute{a} g \acute{i})$ is sent e house selected and makes the proposal. If it is accepted, he ns in a few days with money and sugar which he has received the other family. The father of the boy calls the neighbours, the lágí is seated on a high place with the others all round by way of doing him honour. The parchit or pádha of the

ly makes the boy say some prayers, and then the lagi puts a on the brow of the boy (tilak), and gives him the money and r into his lap. This completes the betrothal. It is said that

After the ceremonies which follow birth the next ceremony in Civil condi-

LUDHIANA DISTRICT.

CHAP. I. C. before annexation, taking a consideration for girls was unknown,

Betrothal among Hindús,

Population. because the rulers would not permit it; and it is still forbidden in the Núbha State. But now the custom is almost universal, although the transaction is still kept secret, and is never admitted; and only a few of the better families abstain from it. Indeed a Jat considers the birth of a daughter a piece of luck, for the ordinary price has in recent years run up very high. No wonder that marriage is now considered a luxury, and one wife enough for a whole family. It is almost certain that polyandry is common in practice, and the manner in which the brother claims karewa on the decease of the nominal husband supports this. The girl is considered as purchased by the family, who can seldom afford to pay so large a sum as her price twice over. In the case of a betrothal, for consideration the parents of the child accompany the lági and a bargain is struck. Part of the price is paid, and the lági performs the usual ceremonies. Betrothals among the common Jats take place now-a-days when the girl is 10, 12 or even older, for the longer she is kept the higher price she will fetch. Boys are kept till 18 or 20, because their parents cannot collect enough money to pay for a girl.

Marriage among Hindús. Gordon Walker, S. R. \$ 78.

Marriage under the circumstances generally follows soon after betrothal. If the betrothal is pun, the girl is married at about 9 years of age: otherwise when the money agreed on has been paid. The pádhas of both parties are consulted and a date fixed. The bridegroom and a few relations go as a marriage party (barát) to the bride's house and the marriage ceremony is performed.

Hindú cere monies at marriage.

The ceremonies attending marriage are as follows:—A place is marked off (called bedi) with four upright stakes joined with oross-pieces of wood at the top, and inside of this the pair are seated with the Brahman who celebrates the marriage; and a small fire is lit and kept up with ghi. The Brahman marks off on the ground with flour what is called a chank, a square divided into compartments, each representing some deity, and worships this in the name of the bride and bridegroom. When the prayers have been said, the marriage mantar or charm is repeated; and the par walk round the fire and chank (ceremony called phera) four times, the women of the spectators singing, and the Brahman repeating his mantars. This completes the ceremony; and the bride and bridegroom return to the home of the latter. The bride spends a few days there, and then goes back to her parents, with whom she resides till she is finally made over to her husband two or three years after (muklawa). There is almost no expense over an ordinary wedding; but where the parents are very well-to-do there is a large marriage party, and all the people are entertained at the bride's house, a good deal of money being spent on danoing girls, fireworks, &c., besides. It is also the custom in good families to give with the daughter a dower of cash, jewelry, &c., and as it is coming to be considered a sign of social rank to be able to do so

instead of taking money for her, it is likely that the custom will CHAP. I. C. spread. Population.

All the clans of Jats practice karewa or widow-marriage. The Hindú cereproceedings on this occasion are very simple. The neighbours are monitor at called, including the lambardars, or respectable members of the village community as witnesses of the ceremony. The Brahman Second or karena marsays a few mantars making a chauk as in a first marriage, and risges. ties the clothes of the parties together. The man then puts a sheet over the woman's head and she becomes his wife. There is no phera or walking round. It is cortain that there is an increasing amount of laxity in the matter of these second marriages, and people live together as man and wife without going through any ceremony. Such conduct is punished by a heavy fine under native rule.

Amongst Muhammadans it is the custom for the parents of the boy to go to the house of the girl selected and make the proposal. and marriage If it is accepted, Ro. 1 and 11 seers (kachcha) of sugar, and some hammadans. clothes are given to the girl, and also ornaments. The priest Gordon Walker, S. R. (mullah) is called, and the girl's father declares the betrothal. The \$79. boy's father is given in return a pagri and khés, and is well fed and sent away. The marriage may take place at any time, except in the menths of Ramzán, Muharram, Shahbán. The nơi of the girl is sent with some clethes to the boy's house and announces the date. The boy and his friends go on the appointed day to the girl's house in a marriage party, and the coromony is performed by the mullah; and the dower is fixed at the time of the ceremony. The jakez or marriage portion given with the girl by her parents varies according to their means, and consists of clothes, jowelry, &c., sometimes cattle. As with the Hindus, the girl spends a day or two in her husband's house, and then returns to her parents till she is finally made over (mukláwa) to her husband.

The Settlement Officer wrote as follows in his Census Report for the District in 1881:—

"Although polygamy is rare, except in the case of very rich men, or of a second wife being taken by karciva, the number of single males is nearly double that of single females. The principal reason given for this is that one family will not give a daughter in marringe to another without either meney or an exchange, by which they get a daughter in marriage to a son of theirs. The Jats mostly take money, and the price of a girl is now very high, so that many men have to remain single. But the real causes are that males are in excess of females, and that they marry at a later age. Moreover, a state of things which is practically equivalent to pelyaudry prevails among the Jats though net openly recognized as an institution."

Brahmans, Khatris, Banias and Sads generally obtain wives from other Districts, especially Jullundur, Ferozepere, and Amritsar and the Native States of Patiala and Nabha. Muhammadans generally marry in their own class and very seldom outside the District. No regular trade in women is known to exist, but wives are as a rule CHAP. I, C. purchased from their parents and as the criminal records show, some-Population, times from professional or non-professional abductors. Amongst Jats males are married at about 15, and females at about 12 years of age. Amongst Khatris, Suds and other Hindú tribes, &c., early marriages are common. Muhammadans generally marry at about the same age as Hindús.

Infanticide

Writing in 1881 the Settlement Officer said: - "Infanticide and treat is unknown, and female children are treated with great care by mest of femost classes (the exception, perhaps, being the Rajputs). They are regarded as a valuable commodity by most Jats, Khatris, Suds and the lower tribes." But enquiry showed that it certainly existed as late as 1874 in Raipur and the other Jat villages in which the Garewals considered that they formed a superior class, and the statistics given above under 'Sex' are not at all re-assuring. They indicate that even if deliberate female infanticide has ceased to be openly practiced, girl children are treated with so much less care than boys that the mortality amongst female children largely exceeds, in some cases, that amongst males of corresponding age.

LANGUAGE.

Language,

Table X of Part II of the census report of 1901 gives detailed

	Proportion per 10,000 of popu- lation					
Panjábi. Rójastkáni.	9,890. 11.					
Vostern Birdi. Kashmiri.	18.					
l'ashto.	2.					
Persian,) D.					

- information as to the language spoken in the District. The figures in the margin give the distribution of every 10,000 of the population by language, omitting small figures. The language of the District is Panjábi, as spoken in the Málwa, in a very pure form. There

are few peculiarities of grammar, but many of pronunciations and the names of many things are as usual peculiar to this part of the country. The glossary and illustrative songs and sayings, etc., appended to Mr. Gordon Walkor's Settlement report give some idea of the everyday language of the people.

TRIBES, CASTES AND LEADING FAMILIES.

Journal of the Asiatic Society of Bengal, Vol XXXVIII, Part I.

Out of a total of 879 villages, 532 belong to Hindú and Sikh Jats; 76 to Muhammadan Jats, 98 to Muhammadan Rájpúts, 87 to Gujars, and 42 to Arains. The statistics of the more important gots are as follows: among Hindú and Sikh Jats-Gil 97 villages, Dhálívál 95, Sandhú 82, Garewál, 55, Punaich 41, Upul 22. Among the Muhammadan Jats-Kúrsá 27 villages, Túr 10, Molívál 9. Among the Rájpúts--Manj 52 villages, Ghorewáha 13. Among the Aráins - Karu 22 villages, Rahil 12, Narú 10. These constitute the agricultural population.

Statistics The principal tribes and castes as classified by Mr. Walker and local distribution of are given below, with their numbers according to the Census of tribes and 1901:-castes.

Priestly classes.

PART A.

Class,		Trib	·.	Total,	Per cent, on whole population.	
Priestly and religions	{	Brahman Paqir	•••	144	24,551 16,509	4 2
Traders and shop keepers	{	Khatri Nada Snnir Súd	 		 15,727 11,210 0,555 2,886	t 2 2 1 1
Agricalturists	{	Jat Hijpút Gújar Aráfn Anin	^ !!:		231,739 29,473 30,108 32,220 4,550	85 4 5 5 1
Nenials and artizans		Churir Chultra Julika Tarl.han Jhinwār Nii Lohir Kambir Machi Chlimba			62,575 21,559 14,576 20,991 18,254 12,359 8,727 9,674 9,231 8,524	9 3 3 3 2 1 1 1

CHAP. I, C. Population.

Statistics and local distribation of tribes and castes.

This leaves 11 per cent, of the whole population unclassified.

The table given below shows the distribution of villages among Distribution of Innd the chief agricultural tribes.

among agricultural

LIST	or	VILL	AGES	184	MITEP.
------	----	------	------	-----	--------

The state of the s										-			
1	,	4	3	4	5	G	7	Б	Ð	10	11	12	13
Name of Tahesi,		ichi ich Jae	Nahram ndan Jake.	Hada Kipte.	Hijpur.	Güjars	Arifna.	Dogurs.	Awans.	Mecellaneous Triber.	Joini of in- habited vil- inges.	Uninhabited villages.	GRAND TOTAL
Famrálı		167	40	3	26	8	2		•••	16	261	14	275
Ludhikua		570	17	••	62	57	17	-4	16	14	125	27	462
Jagráon	•••	110	1	1	13	11	15	,		G	169	6	176
		_		—	_					 		-	
Total of District	•••	521	67	4	ងរ	79	31	4	16	36	855	47	902

The Brahmans are scattered all over the District. They seldom engage in trade, and for the most part live on the Jats of and religious the uplands, few villages being without two or three families: Brahmans. but their services are also required by the Hindus of the large towns. They are of the usual subdivisions of Sarsút Brahmans, and no detailed account of them is necessary. The Hindú (Sultúni) Jats perhaps pay them more attention than the Sikhs, but even the Mulammadan Rippits make use of their services on occasions.

LUDHIANA DISTRICT.

CHAP. I. C.

The principal ascetic class are the Bharáis (6,258). The Population. Hindú Jats of the eastern parts are almost all Sultanis by religion; and outside each village there is a small Pir Khana or shrine erected tions classes: in honour of Sakhi Sarwar Sultán. This is in charge of a Bharáí or guardian, who is a Muhammadan, and is not a celibate. These men are said to be Shaikhs, because they belong to no other tribe. Every Thursday they go to the shrine in the ovening, light a lamp and beat a drum at it. The people make small offerings of cash, grain, &c., (charháva), which the Bharáis take. They also receive small presents at other times and accompany the pilgrims who go to visit the tomb of the Saint Sultán in the Dera Gházi Khán District. There is generally a small plot of land, half an acre or so, attached to the village shrine, of which the Bharáí gets the produce.

Udåsis.

The Udásis are Sikh ascetics of a sect founded by the eldest son of Guru Nának (Srichand). The Census of 1881 found 2,366 of . them in this District while that of 1901 returns only 1,949. They are mostly Jats by origin, the chéla or disciple and successor being usually chosen from this tribe, and are to be found in possession of the dharmsalas in Hindá villages, where they distribute food to such. as come for it, and read the Granth both of Baba Navak and of Guru Govind Singh, although they do not attach much importance to the latter. The head of the college is called mahant, and the disciples chélas. They live in Sikh as well as in Hindú villages, and it is probably on this account that they do not quite neglect Guru Govind Singh. They rarely marry; and, if they do so, generally lose all influence, for the dharmsala very soon becomes a private residence, closed to strangers. But in some few families, such as that of Jaspal Bangar, which keeps up a very large Langar or alms-house it has always been the custom to marry, the endowments being large enough to support the family and maintain the institution; but the eldest son does not in this case succeed as a matter of course. A chéla is chosen by the mahant or by the family. If a mahant whose predecessors have not married should do so, he would lose all weight with the people. The policy of Government with regard to the grants for dharmsalas and langurs is to encourage this class to throw off their religious character by converting them into mere landed proprietors.

Beirágis Saniásis, &c.

The Bairágís (914) are to be found in charge of the thákardwaras or temples of Thakar, and the Saniasis, who are very few in number, of the déviduourds or temples of Dévi. There are a very few Nirmilas and Nihangs to be found in some villages, where they occupy the dharmsálás, and also some jogi fagirs. These do not require a detailed account. There are one or two déras of Suthra Sháhi fagírs.

Sayyids.

The Sayyids have not been included in the religious classes, as they are really agriculturists. There are a few Muhammadan faqirs belonging mainly to the Madári and Jaláli sects,

PART A.

Hero, as to the west of the Sutlej, the Khatris, 15,727, are the CHAP. I. C. great commercial class. Their principal gots are Chirimunj, Nande, Population. Khullar, Jerath at Ludhinna itself; Bahl, Kapur, Mahre, Seth, Beri, Senchar, and Dhir at Jagraion; Batte, Sohudi and Karir at Machhi- olassos:

wara, and Bahlolpur; Sahgal and Thapar at Raikot; Had and Cham Khatris.

There are a great many Búnias of the gots Gar, Goyal, Sítal, Mítal, Eran, Dheran, Basal, and Kasal. Banias, though found everywhere are less numerous than Khatris. In the Jangal villages they are the only shopkeoping class. They number 11,210.

at Khanna. But the gots of Khatris are innumerable.

Bánias,

The Sunars, 6,888, are found all over the District, and are engaged in their trade of gold and silver-smiths.

Sunára.

The Súds, 2,336, deserve mention here, because the Ludhiána District is considered the head-quarters of the tribe. It appears walker, S. R. from the Census Report that there are more than 20,000 of them § 45. in the Province, and that more than a quarter of these are in the Kingra District and about three-fourths in the Jullundur Division. These people are distinct from all other Hindús but their origin is a mystery, all explanation by the people themselves having the object of giving a meaning to the name which will reflect honeur on the tribe. They say that they are really the same as the Raikwals of Agra, Delhi, &c., and they have the same gots, but do not intermarry with them. They have become a separate tribe like the Kaiaths, whom they resemble in the laxity of their religious observances, and in their liking for wine and flesh. Geographically they are divided into the hill (Uchándia) and the plain (Newándia); and socially, into pure (khara) and inferior (gola, chechar). The Suds of the hills are said to belong to the latter class, who have degenerated at some period by widow marriage. The line is now drawn hard and fast; and the two classes do not mix, although the gola Suds do not now marry widows. The Suds are engaged in money-lending principally, and are to be found in Ludhiana and a few villages round, and in the town of Machhiwara. They are

The Súds.

The Jats make up more than one-third of the whole population,

fond of service as munshis, and half the patwiris of the District and most of the kánúnges belonged at one time to the tribe. Though of a good physique, they do not like active service. They are most intelligent, especially in their own interests; and there are many sayings in proof of this, c.y., Súd pár, gathri urár: 'if a Súd is on

the other side of the river, leave your bundle on this side.'

Total. Hłudú, 8ikh. Mahammadan. 234,739 100 25,800 76,886 131,003 11

and own 62 per cent. of the They are distributed by religion as shown in the margin.

It is worthy of note that Sikhism which in 1881 was the

Roligions of

CHAP. I. C. religion of 46 per cent. of the Jats in this District is now professed repulation. by 56 per cent., the percentage of Hindús having fallen in corresponding ratio from 43 to 33.

Religions of the Jats. Gordon Walker, S. R. § 47.

The Muhammadan Jats appear to have been converted to Islám in the timo of Aurangzeb. They are to be found in the Samrála and the upper part of the Ludhiána Béts, or just over them. The other Jats are either Sultánís (Hindús) or Gurú Sikhs (including Kúkas). The Jats adhore to their yots or claus through all religions; and their belonging to one faith rather than to another is generally a mere matter of locality. Thus we find of the Garewál yot Muhammadan villages in the Samrála Bót; and in the uplands, Hindú or Sikh. The Muhammadans are perhaps rather bigoted; but with the others religion will be found to have at present a secondary place.

General qualities of the Jats es egricultarists, Gordon Walker, S. R. § 48,

The Hindú Jat of this District desorves all the good things that have been written of the tribe. If the Jats are the best peasantry in India, we may say that the Malwa Jat possesses in a greater degree than any other branch of the tribe the qualities which have earned for it this distinction. In the Malwa country is usually included at least the whole of this and the Ferozepore District, together with the greater part of the protected States to the south of them. In physique the Malwa Jat is not surpassed by any race in India, if indeed he is not to be put at the top of the tree in this respect. No regiment in the Indian Army can show such fine stalwart soldiers as those recruited from this part of the country; and although detractors are went to say that he has a small heart in a large person, the Malwai has given ample proof that this is mere libel. The Malwa Jat appears to surpass his brother of the Manjha in prudence and thrift; and he is a better cultivator, more capable of managing his farm. As evidence of this, we may point to the manner in which the former has succeeded in the struggle going on under our rule between the agricultural and the money-lending With the Malwa Jat as a rule, the class whose business is ordinarily money-lending has really very little chance, for the former turns his hand to this as easily as to anything else. When a Jat has spare money, he will not squander it; but, if he gets a chance, will lend it on the security of land, Where Khatris or Suds have established themselves in the early years of rule, it is very hard for the people to shake them off; but in the Dhan villages most mortgages of land are to Jats, some of whom have established a very extensive money-lending business. The Muhammadan Jat, though much superior to the l'ajput or Gujar, is not equal to his Hindú fellow tribesman. He is to be found along the river, principally in the Samrala Tahsil, and although excelling as a cultivator, he is often reckless and extravagant—a result that may be due either to his religion or to his surroundings, soil, &c.)

There are two types of the Hindú Jat to be found in this CHAP. I. C. District, the difference being entirely the effect of locality. The Population. Jat of the Pawadh, or highly cultivated and irrigated eastern Jat of the Pawada, or nighty entryated and irrigated eastern Two types tract, is a slave to his land. With him it has been all work and of the Hindu no play for generations, and this has told on his physique and Jats.

Gordon intellect. The cultivation of his holding is a constant round of walker, S. R. toil, especially where there is a large area under sugarcane; and § 49. he is lucky if ablo to knock off and give himself and his cattle a few days' rest during the rains. He has no thoughts beyond his village; and never dreams of service. But withal he is thrifty to niggardliness, and industrious beyond comparison; and it is sheer bad luck if he gets his head under water. When he has a little money to spare, he at once lends it on the security of somo less lucky sharers' land. For the Jat of the Jangal, the lahour of cultivation is of the lightest description, and he appears incapable of remaining idle for long. He turns his hands most readily to earrying: but also goes in largely for cattle trade, service, anything in fact that will enable him to turn an honest penny, for he is seldom a rogne. His favourite method of spending the time between sowing and reaping, when he and his cattle would otherwise be absolutely idle, is to start with a eart in the direction of Ludhiana, sell his own grain, and whatever more he can collect, and return with a load of gur or anything else that he thinks he will be able to dispose of at a profit. The cart is probably at first the ordinary rade one used in field work, and the cattle are those that work in the plough; hut after a few successful journeys he lmys a better cart and probably better cattle, thus extending the field of his operations. This difference of life has produced in him mental and physical qualities, much superior to those of the Pawadh Jat, although the latter is far ahead of other tribes in both respects; and one can tell the difference at a glance. The Jat of the Jangal is undoubtedly at present the finest stump of peasantry in India. What he will he when irrigation from the Sirlind Canal is fully developed remains to be seen. The Pawidh Jat has but one string to his bow, while his brother of the Jangal has at present many. Hard cash finds its way into Jagraion and lower Pakhowal villages through half a dozen channels. Under former rulers, whose system was to take as much from the cultivators as they could get, the Jat was usually kept down; but since annoxation his genius has had full play, and he is waxing fat. I do not know of any class that ought to be so grateful to us. On occasion he can be extravagant, and very large sums are sometimes spent on celebrations, especially in Jagraon Tahsil. This generally means that a man has more money than he knows what to do with. Besides excelling as an agriculturist, the Hindú lat is a good subject and a most respectable member of society. Ho has, as a rulo, no vices; and, although I would not assert that a lively sense of gratitude to us as his rulers is ever present in his thoughts, he knows that our Government gives him greater security than any preceding one did, and he is

CHAP. I,C quietly contented. His chief fault is quarrelsomeness, which has Population, now developed into litigiousness.

Gots or sub-

To the east of the District, and especially in the Samrála Talisíl. divisions of the multitude of gots amongst the Hindú Jats is a very remarkable gordon feature. Not only do adjoining villages belong to different gols, Waller, S. R. but inside each village will generally be found two or three pattis of distinct origin. This is accounted for by the manner in which the country was colonized. In the history of each village it will be seen that the founders came in comparatively recent times from different parts of the country, and belonged to different gots; and that they united merely for their own convenience, the common tie of belonging to the same tribe being sufficient To the south and west, on the other hand, we do find that the Jats in some instances came in bodies, and villages belonging to the same got lie either in groups or within short distances of each other. Thus the Sidhu and Gil Jats appear to have come castward in large parties, and to have settled down in adjoining or alternate villages in the western part of Jagraon. But the rule throughout the District is variety of gots, and the few groups of villages that there are, each belonging to one got, are the exception. The reason for this apparently is that in the eastern parts, in the neighbourhood of Sirhind and Ludhiána, the Imperial authority was always strong enough to protect its subject, who settled down in small villages as they came; while in the west it was less felt, and people of one tribe had to collect in large villages for protection. In Samrála no attempt was made at settlement to return the land as distributed amongst the various subdivisions; but in the other "lahsils it was possible to do this roughly, as there were a few gots owning villages and groups of villages. And the details of area held by the leading gots in these two Tahsils, as ascertained by the Settlement Officer, are shown below, in percentages of the total area of each Talisil:—

'Tal	ısil.	!	Total Jats,	Garewál,	Gil.	Sidhu,	Dháliwál	Dhillon.	Sekhon,	Bhan- dher.
Ludhiána		'	58	8	3	5	3	1	1	3
Jagrãon		***	68	1	5	9	6	2	***	**1

Garawal Jats.

First in rank are the Garewil Jats. This got holds about fifty large villages near Ludhiána in a group, and members of it are also to be found scattered over the District; they number 17,471. They trace their descent to a Rájpút, Rája Rikh, who came from the south and settled in Kahlur in the hills. Bairsi, son of Rikh, left Kahlúr and settled at Naiebád thek to the south of Ludhiána, and contracted a marriage wih a Jatni, called Rúpkaur, and had to start a got for himself, as his brothers would have nothing further to do with him. His son was Gare, whence the name of the got; but another fanciful origin is Karewal from karewa. The

descendants of Bairsi gradually spread over the country to the south- CHAP. I. C. west of Ludhium. The Garcwals are admitted by the other gots to Population. be superior, and are called salu log, i.e., superior. As amongst the Rajprits, their women are seeluded, and do not take part in field- Jats, work. Their girls are sought in marriage by the best families of Sardárs, and even by Rájas. The Garewil families of Rúinur. Gujarwil and Nirangwil had a sort of local authority at the closo of the last century, and are called by pre-eminence sahu log. The Garewals are in consequence of all this the proudest of the Jats, and somewhat inferior as cultivators. They are also very extravagant and quarrelsome; but they take to service better than any other got as they hold it honorable, and in all of their villages will be found men who are either serving in our army or in receipt of pensions. A great deal of money thus finds its way into their hands. When they trust to cultivation alone, they are not so successful. A widow ean marry her dewar (husband's younger brother) or jeth (husband's elder brother) only. This is also the rule among the Gils and Sidhús. Among the endogamous subdivision of the Naibs, widow remarringe is not allowed. Among the remaining sections of the Jats a widow is expected to marry her dewar or jeth, but varying degrees of laxity obtain in the observance of the enstom.

The Gils (10,289) own about forty villages, mostly in Jagraion Tahsil. They are next in rank to the Garcwils, and their women are seelnded. They are also fond of our service. They here claim descent from Súrajhansi Rújpúts, their ancestor being a king of Gharmelo in the south, whose son, Akanra, took to agriculture. The son of Akanra, Gil, founded the got which moved northwards by degrees. They came to this District from Kusla in the Jangal ilage about 250 to 300 years ago, in the reign of Shah Jahan it is said. The Gils are first rate agriculturists; but their habits are generally extravagant.

The Sidhús (12,415) have a good many villages in Jagrion Tuhsil, where there are two or three "Sidhwins." They are a well-known got throughout the Lahore and Amritsar Divisions, and much has been written of them. Those of the Ludhinna District are of the Barár subdivision; and came from the south-west, from Faridkot it is said, in the time of the Rais within the last 200 to 300 years.

Sidhús.

The Dhúriwáls (12,361) have a good many villages lying about Pukhowil and me found in the Jagrion Tabil mostly ancestor was, as usual, Rújpút, who enme from Jaisulmir and settled in Kingar in Nabha territory, becoming a Jat. From Kingar his descendants came into this District under the Rais and their Sikh successors. The Dhúriwúls are accounted one of tho superior gots of Jats, but do not differ much in their enstoms from the others.

Dháriwáls.

The Bhandhers are the descendants of Bhandher, who was the offspring of the union of a Rajput and a woman of inferior custe,

Bhandhèrs,

CHAP. I, C. He settled in Bhatinda first, and thence his descendants migrated Population. to Rao Siáná in the Malaudh iláqa, where the tribe now holds ten or twelve villages.

Sekhone.

The Sekhons had a similar origin to the Bhandhers, and came to this District from some place in Patiala territory, Bhadaur it is said. Their villages are scattered all over the District.

Dhillons,

The Dhillons (6,394) say that they came from the Mánjha in the reign of the Emperor Muhammad Sháh.

Minor gots of the Jats are-

Mán	•••	•••	•••	***	•••	4,868
Sindhu		•••	•••	•••		5,338
Mangat	•••	•••	•••	•••		3,547
Chima	•••	414	•••	***	***	3,583

It would take up too much space to detail the tradition as to the origin of each of these. They are to be found scattered over the District, holding single villages or subdivisions of villages.

The Rajputs; the tribe Gordon Walker, S. R.

§ 51.

The Ráipúts are undoubtedly the oldest of the agricultural their charactribes that now hold the District. Mr. Walker writes: "It ter; sab of might perhaps be taken as good evidence of the demoralizing effect of the Muhammadan religion that the Hindú Rájpút is very little inferior to the Jat as a cultivator. In the Bét of Samrala the most prosperous village belongs to them, the proprietors being free of debt and largely engaged in trade. The Muhammadan Rájpút of this District possesses at least all the bad qualities generally ascribed to his tribe. He has a good physique, but this is about all that can be said in his favour. As a cultivator he is useless, being indolent and apathetic to a degree. He will never do an honest day's work if he can help it, and spends every penny he can borrow. His village is generally a picture of slovenly cultivation; and he will tell one that this is because it is not his proper business to follow the plough, and because his women are secluded. If possible he will rent his land to some one else, and never fails to try to spend more than his neighbour on a marriage celebration, regardless of the fact that it is certain ruin to him. His women are said to be quite incapable of managing their household affairs, and the Hindú shopkeeper in a Rájpút village makes a fortune in a very short time, at first, it is said, by cheating the women, and then by getting the men into his books. If a Rájpút does take to service, it is only in a half-hearted way; and he will on the slightest excuse throw it up and return to his village. In fact the Muhammadan Rájpút of this District has, as far as I know, no redeeming points in his character, and is a perfectly useless member of society. I may mention that at the Regular Settlement the Muhammadan Rajput villages were treated very leniently, and in many cases pay half or one-third less than their neighbours; but this moderation appears to have had no other effect than to encourage further CHAP. I, C. extravagance. The great feature in a Rájpút's character is, I population. think, a complete want of anything that could be so designated. The Réjivate; He is the most vain and foolish of mortals, and can seldom give a their characreason for anything that he does. He is, as a matter of course, tor; subdiscontented; but it would require a peculiar state of society to the tribe. suit him. These remarks apply to the tribe as a whole; but there is a daily increasing number of members of it in whose favour an Gordon welker S. R. exception should be made." The Rajputs in this District are \$ 50. mainly Muhammadaus, at the Census of 1901 they numbered 29,473 of whom 1,331 were Hindús, and 344 Sikhs. The Hindu Rájpúts inhabit two or three villages in the Samrála Tahsil. The most important subdivision of the tribe are Manj Bhatti, Ghosewaha, Punwar, Naru, Tawar, and Warya. Of these the Manj are the most numerous (5,990). They are all Muhammadans and are found chiefly in the Jagraon Tahsil. They profess to be Bhatti Rájpúts. The Manj Rájpúts own a good many villages in Jagráon Bet and uplands. They come from the south-west, their ancestor Cháchu leaving Faridkot and settling at Hatúr. From Hatúr the descendants of Cháchu founded several large villages, Andlu, Halwarah, &c., in this District, and also crossed the Sutlej. The family of the Rais of Raikot is looked upon as the head of the got on this side of the river. These Rais at one time held a great part of the District under their sway, and a detailed account of the family will be given elsewhere.

The chhat system prevails among the Manj Rájpúts.(1) The two ancient chhats of Hatúr and Talwandi Rai in this District date from the time of Bábar, while two more, Raikot and Hatwara, have since been added as Manj Rájpúts have settled in them. The Rais of Talwandi and Raikot pay a chhat of Rs. 20. There are two makans in the District; Raisar and Andlu. The custom appears to be losing vogue.

. The Ghorewahas are another numerous section (4,562), live Ghorewahas. rather to the east of the District in the Samrála Tahsil, owning a large number of villages along the Sutlej both in this District and in Jullundur. They founded the town of Rahon in the Jullundur District. They are Surajbansis and trace their descent from Hawaha, brother of Kachwaha, who came into the country in the time of Shaháb-ud-dín Ghori (1,150 A.D.) and was allowed a grant of as much land as he could ride round in a day. Others say he presented a nazar of a horse and got the tract which his descendants now hold.

The Bhattis rank highest in the tribe. They usually marry among themselves, but sometimes give their daughters to other Rájpúts of good family. Their ancestor, Sheikh Cháchu, was granted the state of Hatúr, on his conversion to Islám, which had formerly

CHAP. I.C. belonged to the Tunwar Rajputs. The Tunwars, Punwars, Narús Population, and Wayas all seem to have come to this part of the country in the days of Prithvi Raj. The Narus founded Phillaur in the Jullandur District.

Gújars. Gordon Walker, B. R.

The Gujars of this District are unable to give any distinct account of who they are or whence they camo, but it appears pretty certain that they are a nomad race (Gau-char=Gújar) who moved from towards the hills in search of pasture, and gradually settled down along the river for the sake of the grazing. They now hold a number of villages in the Bet or low-lands, mostly in Ludhiána Tahsíl. About 100 years ago Sardár Sudha Singh and the Kákars, who held the Bet lands under Ludhiána, located them in villages; and they have only since then taken to agriculture. The Gujars of this District are all Muhammadans. They are of good physique, tall and well made, but are said to be lacking in courage. Intellectually they are not strong; and they are, as a rule, much too easy going and careless to get on in these times. As cultivators, they are not of the first class, though superior to the Ráipúts. They have a hereditary liking for cattle, especially that of other people; and most of the Gujar villages contain men recognized by the police as criminals. They are, as a tribe turbulent, discontented and lawless; and gave a great deal of trouble in the Mutiny. Gujar women help their husbands in the fields. The principal subdivisions are Gorsi and Chechi, also Kálas and Paswal.

Aráine,

The Aráins of the District 32,220 appear to have worked their way up the Sutlej from the direction of Multán. They are also said to be Kambohs converted to Muhammadanism. It is very probable that they did come up the Sutlej, for they can be traced along its banks in the low-lands of Lahore and Ferozepore and half-way up this District; but they are not to be found higher than the town of Ludhiana. They are probably a mixed race, gardeners by profession, who in some locality or other have formed themselves into a separate tribc and spread over the country. The Arains are all Muhammadans. They are generally small, wiry men, capable of a great deal of labour. As cultivators, they rival the Hindú Jats, but are inferior to the latter in intellect. Intensive cultivation is their strong point as extensive cultivation is the Jat's. An Aráin will support himself and his family on a very minute area of irrigated land, on which no one else could possibly exist: but, as the owner of a large holding, he is less successful than the Jat, and does not seem to have the power of managing a large farm. All the members of his family assist the Aráin in his cultivation; and the women sell the vegetables or exchange them for grain. The Aráin is a very quiet and inoffensive member of society, and does not appear to trouble himself about politics. The principal subdivisions in this District are Ghalar, Ghalan, Jatáli,

The Awans, 4,580, are said to be a race of foreigners, who CHAP. I. C. came with the first Muhammadan invaders from beyond the Indus. Population. The tribe holds some ten or twelve large villages round about Ludhiána situated in the low-lands and in the Dháia. Their number is understated in the census, some having perhaps been returned as Walker, S. R. Shaikhs. The Awing are all Muhammadans. They are a very fine \$54. Shaikhs. The Awans are all Muhammadans. They are a very fine, powerful race of men, and are inferior only to the Hindú Jats in intellect and enterprise. They are very fair cultivators, but do not depend entirely on agriculture, and are always ready to turn their hands to anything. They are fond of service in the army, police, &c.; and most of their villages can turn out a number of carts which are worked for hire. In the last Kabul war they made a great deal of money by carrying between Jhelum and Peshawar, and some of the villages depend much more on their carts than on their fields. They are an extravagant race, and spend at least as much as they earn. The Awins are very strict Muhammadans, and say their prayers regularly. Very many of them have received a religious education and are Maulvis. Their women are secluded. Their chief fault is quarrelsomeness, which has, as in the case of the Jats, developed under us into a love for litigation.

Gordon

There are a few Dogars in the Bet, 2,411. They resemble the Gujars, being of good physique, but wanting in intellect. As the Dogars cultivators, they rank with the Gujars, and run them very close as thieves. Their women work in the fields. There are one or two \$ 55. whole Sayyid villages; and the tribe holds shares in others scattered over the District. Those of Taraf Saiadán, one of the subdivisions of Ludhiána, are respectable and well-to-do; but, as a rule, the Sayyids are poor cultivators, being much too lazy. There are a few Sainís and Kambohs, the latter being Muhammadaus.

Minor land. Gornon Walker, S. R.

Sayride,

The following Pathán tribes are represented in this District: -Balozai, Tarbau, Barakzai, Daudzai, Ghilzai, Gore, Tamán Khel. Yusafzai, Jangzai. Besides their own women, they will marry among the Chohans, Mujis and Behues, but will give their daughters in marriage to them. Patháns number 3,939. They are mostly refugees from Kabul living in Ludhiana town but an ancient colony of them hold lands in Bahlolpur.

Pátháns.

The Kaláls might almost have been classed as agriculturist Miscellaneous for they are all either land-owners or in service, generally both. A proposal to include them among the agricultural tribes has been submitted to Government.

The Kápurthala Chief held a very large portion of this District under Mahárája Ranjít Singh; and this has given the tribe a step in the social scale. They call themselves Ahluwalia or Neb, never Kalál, and are Sikhs. Some of them hold small jágírs and they generally distinguish themselves in service.

Kalále.

Ráwáts own one village near Ludhiána, and number 2,298. They have certainly nothing in common with Rajputs, being the

Ráwáte.

Lobánas.

CHAP. I, C. mildest of men, and first-rate agriculturists. The criminal classes Population. of Hárnís, Bauriáhs and Sánsís, are also land-owners. The Hárnís were settled down in three or four illustration. were settled down in three or four villages in the east of the District by the Sikh chiefs who overthrew the Rais of Raikot; and the others own each of them a village. These men all call themselves Rájpúts. An account of them will be found elsewhere in this volume.

Banjáras,

Banjáras (1,099) and Lobánas (1,004) live solely in the Bet. They appear to have the same origin (said to be a Rájpút one, as a matter of course); but they are now quite distinct. The Banjáras are a somewhat superior tribe, but it is said that in this District the two tribes intermarry. They are both Hindús or Sikhs by religion; and, besides agriculture, are engaged in carrying grain, &c., on bullocks: and the Lobanas in making ropes, brushes, &c., from muni.

Lobánas.

The name of Lobána is applied in this District to two entirely distinct communities called in the Census Report "Musla Lobánas" and "Ludhiána Lobánas," respectively. The Musla Lobánas are so called by the other group to emphasise the fact that the two groups are distinct. They are akin to Gujrát Lobánas and give their gots as Pilye, Garhe, Laldize and Datles. Only two of these correspond with the gots of the Gujrát Lobánas. They live in the villages of Salijo Mazra, Burj Kacha, Pawat, Fattehgarh, Hambomal and Tanda Kalia. Their customs are partly Muhammadan and partly Hindu, for instance they observe the ceremony of phiras, but a widow is remarried by nikali. This eclecticism is reflected in their names.

The Ludhiána Lobánas are all Sikhs. They live entirely in Bet, owning the villages of Balbgarh, Mangli Tanda, Dholanwal, Sasrah, Rur, Tanda Kishan Singh and Gopélpur. They are also found in the villages of Garhi Fazal, Jassowal, and Lubangarh. They are said to be a branch of the Chauband Rajput. They have the following gots: - Dagnawat, Udiána, Sukiána, Majrawat, Bartia, Balthia, and Barnawat. They are distinguished by having a fixed bride-price. Rs. 120 being paid if the bridegroom is a child and Rs. 140 if an adult, to the girl's father. On the Holi festival these Lobánas have a curious custom. After burying a pice and a betel-nut they heap up cow-dung cakes over the spot and make a large fire. When the fire has burned out, they gather in large numbers round the ashes and proceed to hunt for the pice and the betel-nut. Whoever finds them is very lucky, and it is believed that he who finds one must find the other. The custom is referred by them to a variant of the Praladh legend. They practice karewa and worship Guga Pir.

Monials and artizan elasses: Chamárs, Gordon Walker, S. R. § 56.

Next in point of numbers to the Jats are the Chamárs (62,875), who are returned as nearly one-tenth of the whole population of the District. These people are the most degraded of all classes except the Chúhras; and their position in the village very nearly approaches to that of servitude. They are known as begári and are found attached to every village in the District, for the zamindars cannot get

PART A.

on without them. They cat the dead cattle, and are considered so CHAP. I. C. unclean that a separate place is assigned for their residence. Population. They are bound to perform certain tasks (begin) for the zamindar, and receive certain allowances of grain and all and autom carrases of eartle. They cannot change their place of abode, for a classes: Chamer of one village would not be allowed to settle down in another. Further details as to their times and services will be found elsewhere. They are all leather-workers, tunning the skins of the dead minute that are given them, and making backets for the wells, blistis' and the (water-bags), shoes, &c. They are paid for all new goods supplied, but repairs are included in their task.

They have a sorn to, but not Chamaren Brahmans, in this District, i.e., a certain section of the caste performs priestly duties. They consider themselves superior to the other. Chamirs, and do . not marry outside their own errole. The Chambes bury their dead.

Chaltrae

Change (21,559) are found mostly in the towns and in some vilinges where they are servants of the higher classes of slats and of the Riphs, or are village servants (i.e.) for the purpose of -ummoning people (b liri).

Tarkhins,

Tarkhéns (20,994) or carpenters have taken to agriculture, and over clares in several villages. These who follow their hereditary oscupation are to be found in nearly every village, for they are a necessary element in the agreeditural community. The Tarkhin, though chosed as a village mental (more properly on artisan), is a man of very superior intellect, and secupa so pood social position. He can emponently make his own torms with the confiding and moves about he hades. He does all cores of curpenter's work, receiving a fixed allowance of hartest time for all repairs and the price of all new work. There is a large colony of Tarkhins working as corporators in Ludhilian. The so make corts, all sorts of furniture, lexes, &c.; and some of them have annaeoul great wealth, which they invest in land when they can. Many of them are that in service; and it is a proof of their good social position that Ring Smell, the Gara of the Külas, belong to the tribe.

linhars.

The Lobic (5.727) are also village servants, who do all the innercork of the perioditurists, or they are attled down in the larger towns and follow their trade there.

Jhinwars.

The Thinway is not urce sary in most villages, for the Jat women usually forch the water for domestic use themselves. He is to be found in the towns or in the Rejprit and higher class dat villages, where the grangen me eveluded. His services are required everywhere in marriage and other colchrations. The system of easte pendacate is still in existence among the dhinwars, but is crid to be losing by hold on the caste. They number 18,293,

Sale

The Not is found everywhere, and is a very intertant village servant. He is the barber, and is always employed in arranging betrothals, being sent usu lifei or go-between. They munior 12,389.

CHAP. I. C Julahas.

The Julahás (16,786) or weavers are scattered over the villages, Population. where they weave the cotton thread of the zamindars into cloth (woollen blankets are woven by Chamárs or Chúhras who have taken to the profession). There is a large colony of these people in Ludhiána.

Kumhárs Mochis. Chhimbas.

The Kumhars, 9,674, (brick-makers), Mochis, 9,233, (leatherworkers), and Chhimbas, 8,824, (washermen and cloth-stampers), reside mostly in the towns. The agriculturists generally make their own bricks for the wells, but go to the Kumhars for water jars (chatti) and other utensils; and have an agreement by the harvest about these. The Mirásís (5,900) are found all over the District, principally in the Rajput villages. They live by alms.

The Kashmiris are settled in Ludhiana town. They are a dwindling community (4,766 in 1901 as against 5,421 in 1891) and are in sore straits now that their hereditary occupation has gone (see Section E. of Chapter II).

The following have been declared agricultural tribes for this District under the Land Alienation Act (Notification No. 21 S., dated the 22nd of May 1901):-

> Jats. Rájpúts. Awans. Sayads. Patháns.

Gújars,

LEADING FAMILIES.

1. Phulkián Families: (a) Bhadaur Walker, S. R. § 88.

At pages 253 to 279 Griffin's Punjah Rájás will be found an account of the Bhadaur chiefship, and of the manner in which the Patiála claims over it were rejected on their merits in 1855. Gordon The estate was a portion of this and of the Ferozepore Districts, the Ludhiána villages being in the Pakkhowál Tahsil (since abolished) till the year 1858, when the whole jagir was transferred to Patiala, the supremacy being allowed by favour of the British Government and not by right. It is not necessary under the circumstances to do more than mention the family. Sirdar Sir Atar Singh, K.C.I.E., resided principally at Ludhiána, where he had built a magnificent house and had opened a public library. His services in the cause of learning are too well known to require to be noticed here. He had acquired a great amount of local influence in Ludhiána. He died on 10th June 1896, leaving two sons, Sirdár Bhagwant Singh and Sirdár Balwant Singh.

> In pursuance of the will of the late Sirdár Sir Atar Singh, K.C.I.E., the Library with all almirahs, chairs, &c., was sent to the Punjab Public Library.

> Sirdar Balwant Singh, the younger son, died recently at Bhadaur leaving a minor son. The estate is under the management of the Court of Wards. Patiala State.

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family.

CHAP. I. C. Man Singh died leaving an extensive estate to his two sons, Population. Dalel Singh and Bhag Singh, who quarrelled about the division of this. The dispute was referred to Sirdar Chuhar Singh of Bhadaur, and the decision then given had established the rule of succession in the family. The elder son got two-thirds and the younger one-third; and it is according to these proportions that all subsequent distributions of the jagir have been made within the various branches. There has never as yet been more than two sons to succeed in any branch. The Malaudh family maintained a position of independence, the relationship to the Patiála Rájás giving it immunity from the attacks of its neighbours. It came under our protection with the other cis-Sutlei chiefs at the beginning of the century. When the Ludhiana District was formed out of the territorics annexed in 1c46 the Malandh estates were included in it, but the jágír was maintained in its entircty as the family had not been compromised in the struggle of 1845. The jágírdárs were allowed to continue collections from the cultivators till in 1850, when a cash assessment was fixed for the villages of the jági. The family, like all other eis-Sutlej chiefs, except the six treated as independent, was deprived of all powers, and its local influence may be said to have almost ceased, for the Jats. who make up the population of the villages, have little respect for anyone who cannot display authority over them. In 1860 the representatives of the three main branches were invested with magisterial powers, to be exercised within the local limits of their jágirs, and this measure has done much to resuscitate the influence of the family, and has placed it in a much better position with regard to the people, who up to 1846 were as much its subjects as the villages of the Patiála State now are of the Mahárája. The valuc of the jágir, as recently assessed, is Rs. 86,455, and it is thus distributed between the three members of the family:--

			Rs.
(1).	Sirdár Badar Singh		 45,910
(2).	Sirdár Sundar Singh	•••	 22,037
(3).	Sirdar Belwant Singh		18,508

The family, besides enjoying these revenues, also owns a good deal of bir, or land reserved by the chiefs for grazing, firewood, hunting, &c., as well as all holdings of such as absconded on the introduction of a cash assessment or subsequently. Some of the birs are of considerable extent and are still covered with a growth of wood. The villages of the jagir wore distributed between the other Sirders before annexation; and in 1878 between Sirders Badan Singh and Sundar Singh. Sirdar Uttam Singh, the head of the family lived in Raingarh (near Malaudh) where there is a large fort built by his father Sirdár Fateh Singh. Ho had also the fine old fort at Sahna, built by Chaudhri Bakhta; but this he schoon visited. The Sirdir had the powers of a Magistrate of the 2nd class and civil powers in cases up to Rs. 500 in value. These powers'

were afterwards withdrawn, a. Government was displexed with CHAPLE. Lymon mesent of his despute with his wife Sirilirni Ind Knur, Population. He was alse a Provincial Berbirt. He died in October 1895 and le. Gen and property were divided by two co. Sirder, Balan Singh as it. real Smaler Stell at the ratio of two thirds and one-third, respectnely. His main Sad em Ind Kater was given a mointenance of Its loss per moreon, to be paid in the chairs they inherited the property of their fatter.

See Fr. Mr. Small but he bear of the country Mating, engage. ing I give en und to to en to the extent of his ability. Togethin for several end of the graph and man can of half of his companihave notices for highlight ender but the pay two comes in the maper of them every here is realist. Into the pay only one appra-Solly Rolly, Sandy, the reason to be brilled by histing member of the SA community in the Detroit, reads at Malandle. He and many the engineering and and continued toward in his father mital that when he was permated to solunt only recorn them to loss on Sales by Sales, and all disability has reproduke title of PSL oute advanced to Consider Dable of 1965 Helic at , Sabath , were for the willow bold by the family in code, Has range of the State, really Security South, reader of Pakilladie to be Select and a serious of Devider. He a totally bland and receiving really as tightly as the first harform or upstate antimiper.

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The entries in importance to Melandhan that of Ludhian, good tom The experience of the Landy, due Landy, was a Chirm dat of Karanka the dy of Patrice of Mer in the America Detroit. He was naturable tobele. of the had by the ode bridge, and in the cramble for territory to the feet which have I the expense of Subset in 1763 A. D. council in person of receiver lying between Iridhida and Sannilla with 2) Subject of Parties in the Klaster Tale Hof Ambilla District, Is Such give be hadle . Not a Sugh, one of the former village. Palmaria, which the descendant of the later will hold. In Simple believe en , Charl South and Kharal South, the latter of whom was a nature or rather and use allowed by his brother one village, How do, which still be our to be, descendants. The ret of the territory went to Charat Smrb, who in 1809, incopied thrish proterron. There was a dispute with Patisla as to the Kharac

CHAP. I. C. villages, which ended in the Ladhran family getting four out of Population. seven. The territory in Ludhiana was small, and the relations between the family and the Nábha State appear to have been rather doubtful. At pages 392-394 of the Punjab Rájás will be found an account of the claim to supremacy set up by Nábha, and the decision of Government of India on it. Although the Ladhrán Sirdárs, like others of the Nishánwála group, were at times in actual opposition to Nábha, there can be no doubt that they gradually became to some extent dependent on that State. After the campaign of 1845-46 the Ladhran territory passed into our hands, and was included in the Ludhiána District, the jágír being maintained to the family. The descendants of Charat Singh are very numerous, and the jagir, which is worth Rs. 24,152 in all, is becoming more and more subdivided.

> One or two of the family had taken to service, Sirdars Hari Singh and Albel Singh were Risáldárs in the 12th and 13th Bengal Cavalry respectively, Sirdár Albel Singh was accidentally killed in December 1902; and Sirdár Hari Singh enjoys a pension as Risáldár. Sirdár Albel Singh's son, Kartár Singh, is a Risáldár in the 12th Bengal Cavalry. Two more members of the family are employed as Sowars in the 13th Bengal Cavalry; but most of them prefer to eat the bread of idleness. It is likely that in another generation or two the shares held by many members of the family will be insufficient for their maintenance. The rule of succession in the family is of Chindawand, i.e., the estate is partitioned according to the number of wives of the deceased, tho children of each wife dividing a share between them equally. Tho family also owns landed property, one whole villago and shares in several more and some very fine houses at Ladhrán, where they all reside.

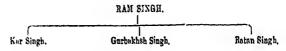
> The pedigree of the family is attached. Mahtab Singh, the head of the family, who was zaildar, died on the 22nd February 1904. His debts are in course of liquidation from the jagir under the control of the Deputy Commissioner. His son, Raghbir Singh, is employed in Núbha State as Názim. There is no other man of any importance in the family.

Babkdur Singh. Chutar Singh.

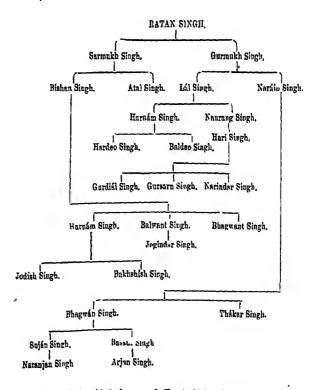
Uttam Singh.

CHAP. I. C. Kotla Badls. Gordon § 90 (1).

The founder of this family was Rái Singh, who came from Population. the Amritsar District in Sambat 1916; and, on the fall of Sirhind, secured four villages, Badla, Kotla Badla, Bhari and Saidpur. The family, like others in this Tahsil, maintained their independence in the midst of their more powerful neighbours; but it is probable that all of them would eventually have been absorbed by the Phulkian chiefs or by Lahore, but for our interference, The villages came to us when the rest of the country was annexed in 1846. The pedigree of the family is given below:-



The descendants of Kar Singh and Gurbakhsh Singh hold Badla and Kotla Badla, but they are too numerous to mention. Ratan Singh's descendants hold the villages of Bhari and Saidpur. The pedigree of Ratan Singh's descendants is given below:-



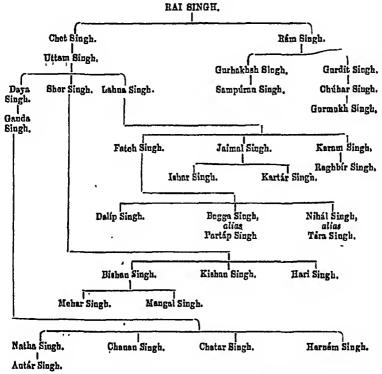
The whole jagir is worth Rs. 7,612. Lál Singh is dead and there is no other person of note in the family.

PART A.

The founders of the Jabu Mazra family were Rái Singh and CHAP. I, C. Rám Singh, Jats (got Kang) from Amritsar. About 1863 they Population. secured 16 villages to the south-west of Khanna, but were exposed to constant attacks from Patiala and the Kapurthala chiefs, who finally annexed and divided the whole estate. The Sirdárs complained to the Resident at Ambála and eight villages were restored to the family. These they now hold with a revenue of Rs. 10,755.

Jabu Mezra. Gordon Walker, S. R.

The pedigree of the family is given below:-



There are two branches, one (Rám Singh's) residing at Jabu Mazra, and the other (Chet Singh's) at Dhiru Mazra. There is little to distinguish these men from the Jats around them except their extravagance, and not one of them is in service. Ganda Singh is the head of the Ram Singh branch; Gurmukh Singh is the head of the Chet Singh branch, but is at present undergoing 7 years' imprisonment for dacoity in Patiála State. He was jágírdár of Rs. 2,584-8.

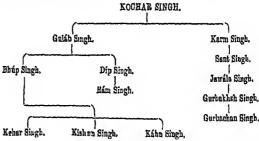
The Kotla Ajner family have a jágír of four villages acquired by the ancestor of the present holder, a Manjha Jat, subject of the Ahlúwalia chief. The lands came to us by annexation with the other Kapurthala territory in 1846; and the jagir was confirmed to the family, half to be held in perpetuity. The revenue is

Kotla Ajner. G ordon Walker, S. R. § 90 (3),

CHAP.I.C. Rs. 42,922, half of which is now received by the members of the Population. family. The pedigree is :-

Kákar family.

Kotla Ajoer.



The jagir is worth Rs. 2,146 and the family is of no importance at all and none of the members are in service.

Gurbachan Singh, son of Gurbakhsh Singh, is a minor and his estate is under the management of Court of Wards.

Other jágírs of less note are:-

Nishanwala:-Holding four villages in shares with Government (Rupalon, &c). The revenue of the jágír is Rs. 2,354, which is divided among six or sevon families.

Sontiwalá:-Holding three villages in shares with Government and having an income of Rs. 5,077.

Shamspur:-Two villages with income to the jagirdars of Rg. 2,601.

Salaudi: - Three (villages) shared with an income to jagirdars of Rs. 1,485.

Dhin Mulana: - Dhin Mulana (Ambála) Sirdárs have one village in jágír, Rs. 2,221.

decayed fami-Sodbie of

Machbinara.

Mention has been made in Chap. I. B. of the various minor chiefs who held the Tahsil at the time of annexation. Such of these as were driven across the Sutlei and have no further interest for us here need not be noticed; but there are one or two whose families have since become extinct, or who, though losing their possessions after the Sutlej campaign, maintained their local connection. The Sodhis of Machhiwara held two or three villages in the neighbourhood of that town, and a masonry fort in it, but the jagir was confiscated for their conduct in 1845. Sodhi Sarmukh,

a representative of the family, still resides in Máchhíwára and owns a little land but has no position. There were a good many branches of the Kákar family which

Kákar family. came from the Jullundur Doub. One branch took possession of several villages about Bahlolpur, but was spoiled by Maharaja Ranjit Singh, who, however, restored some of their possessions in jagir. For the conduct of the family in the war of 1845 the greater part of the jagir was confiscated and the rest lapsed by escheat shortly after. Sirdár Jawála Singh, a member of this family

was a Risáldár. His son Mangal Singh has recently retired as Risáldár-Major of the 3rd Bengal Cavalry. He visited London at Population. the Diamond Jubilee in 1897 and has the title of Sirdar Bahadur. Kakarfamily, He is a man who will be increasingly useful to District Officers as he is still active and fit for service.

There was a large jágír held at the time of annexation by Sirdární Dayá Kaur of Khanna, the daughter of Dasaundha Singh, jágír. a Majítha Jat, who had established himself at the same time as the other jagirdars from across the Sutlej. He was the servant of Tárá Singh Ghaiba, referred to in Chapter I. B. Dayá Kaur was the widow of a son of the Raja of Jind and was continued by us in the possession of the iágir of her father's villages till her death without issue in 1850, when the jágir lapsed. She had a large fort at Khanna. The jagir consisted of seventeen villages with a jama of Rs. 30,217.

The ancestor of the Kheri Sirdárs, Nand Singh, was a Jat who Kheri jágirs. came from the Maniha to assist in the capture of Sirhind; and afterwards established his powers over a very fertile piece of country in the south-east corner of the Tahsil. This was then only partly settled by Muhammadans and others, many of whom deserted their lands; and to Nand Singh is due the founding of most of the villages of the Kheri ildga which is now one of the richest and most highly assessed portion of the District. The family maintained an independent position till they were absorbed by us in 1846. The jágír was continued to Sirdár Basant Singh, who was succeeded by his son Harí Singh. The latter died without issue in 1866 and the jágír then lapsed. Sirdární Nihál Kaur, widow of Harí Singh, and two other female relatives, Ratan Kaur and Sáhib Kaur, enjoyed considerable cash pensions, and Nihál Kaur had a life interest in the estate of Hari Singh which was very large, consisting of shares in a great many villages, and considerable areas of bir land. The Sirdární is a sister of Sirdár Badan Singh of Malaudh.

Sirdární Nihál Kaur who was in receipt of a pension of Rs. 2,500 per annum died on 1st March 1888, when her pension stopped. Mussammát Sáhih Kaur, in receipt of a pension of Rs. 1,500 per annum, died on 15th March 1886, and her pension stopped from that date. Sirdární Ratan Kaur is alive and receives a pension of Rs. 1,800 per annum. On her death the question of reversion of her lands in which she has only a life interest will arise.

Besides the Malaudh family, there are one or two others Minor jugits which hold smaller jagirs in the Ludhiána Tahsil.

of Ludhiána Takeil, Gordon Walker, S. R.

The Khosa family of Jats belongs really to Bankandi in Khosa jágire. Ferozepore District. They hold three or four villages with a revenue of Rs. 3,362 in shares with the Malaudh family.

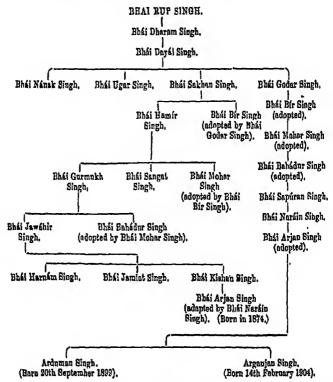
CHAP. I, C.
Population.
Hans.

There are two families of Kalál jágúrdars at Butáhrí and Hans, who hold the villages given them by the Ahlúwália chief. Their income is Rs. 2,377. Dayál Singh, a leading member of the family, is a person of great local influence and is a zaildár. Some members of the family have received land on the Chenáb Canal.

Bágarián,

A mention of this family will be found on pages 245—250 of Massy's Chiefs and Families of note in the Punjáb.

The pedigree of the family is given below:-



The family has one village (Bágarián) in jágir (Rs. 3,800) and three villages (Kalahar, Dewala and Mehlan), aggregating Rs. 2,385 in much for the upkeep of a Langar at Bágarián in this District. There are two villages in the Ferozepore District and one in Farídkot State, with an annual income of about Rs. 4,940 assigned for the same purpose. The family owns landed property carrying an annual income of about Rs. 8,000 per annum.

On Bhái Naráin Singh's death his adopted son Bhái Arjan Singh succeeded him, but as he was a minor his estate was put under the management of the Court of Wards and was released on 1st October 1895 on his attaining majority.

He exercises the powers of a Magistrate of the 3rd Class in the village of Bagarian. He was given a seat in the Coronation Darbar at Delhi. He was appointed a Provincial Darbari under

PART A.

Chief Secretary to Punjáb Government's letter No. 277, dated CHAP. I. C. 21st April 1903. Population.

Bhai Arjan Singh was most liberal, like his forefathers, in feeding the poor in the Famine of 1899, especially Marwaris who were fed at the rate of 400 a day.

Bágarián.

Bhái of Arnauli, who has a jágír in Ambála, holds one village (revenue Rs. 1,843) in this Tahsil.

Bhai of

Of the Kakars who held the Ludhiana Bet at the end of the last century there is one representative, Partip Singh, who resides in Barnibara and is in receipt of a pension of Rs. 30 per mensem, while Basant Singh, an adoptive grandson of Sudha Singh Gill, also gets an allowance of Rs. 500 per annum and lives at Mangat.

of the Lahore Board of Administration, reside in Jagraon, where Tabell, The family they have very fine houses, and they have two villages of this of Rajab Ali.

Tabsil with a revenue of Rs. 3.179 in idea. Tabsil with a revenue of Rs. 3,179 in jagir. The founder of the walker, S. R. family was Muhammad Jafar, a Sayyid, who settled in the neigh- 5 92. bourhood of Jagraon under the Emperor Muhammad Shah, and got a grant of some villages round Talwandi Kalán. His descendants lost their possessions when the Sikhs took the country from the Rais. Rajab Alí subsequently recovered the jagir of two villages.

The pedigree is:-

MUHAMMAD JAFAR, Fagir-ullah, Baltan Muhammad, All Bakhah. Maulyl Sayyid Rajab All. Bharif Hassan, Sharff Husibin, Abbis Hussein. Ali Akbar. Muliammad Mustafo Hasson. Murtusa Hassan, Molisan. Sharif Muhammad. Abu Taráb. Znin-nl-Abdin, (Rorn 1890). (Born 1893). (Born 1896). Ahmad. Sharif Ali. (Born 1881). (Born 1892).

The tomb of Fagir Ullah still stands in Talwandi. Hussain is Náib Tahsildár in the Punjáb, Ali Akbar was zaildár of the Jagraon zail but has recently been dismissed for incapacity. Sharif Hussain is a respectable old gentleman and his son Mustafá Hassan is unobjectionable, but the family is going down hill fast,

CHAP. I, C.
Population.
Other petty
jdgfre.
The Ráis of
Ráikot.
Gordon
Walker, S. R.
§98.

There are Sodhi families in Mallah, Bhamipura and elsewhere, holding petty jagirs which are gradually lapsing; and Jat families in Rajoana and Tughal; but these do not deserve mention.

The Ráis of Ráikot played such an important part in the history of this District that it will be well to give some of the details connected with the family. They belong to the Manj got or subdivision of the Rajput tribe; and the ancestor of the Rais, Rána Mokal, is said to have come from Bhatner (or Jesalmír) and to have settled in what is now Faridkot territory. Fourth in descendant from him was Tulsi Das, who became Muhammadan in the reign of the Emperor Ghiás-ud-dín Ghori, the family chronicle says, that is about the middle of the 12th century (the same period as that to which the Ghorewaha Rajputs of the east, ascribe their arrival in the part of the country now held by them), and was called Sheikh Cháchú. His sons Bháru and Lapál came to Hatur, a large village in the Jagraon Tahsil, where they appear to have lived by plunder under the shade of an importunate Panwar Rajput, called Udho, the circumstance being recorded in the popular tradition "Kháun piun Bháru Rái; Pakará jáná Udho Panwár," which means that Bharu got the plunder, and Udho the blows. Finally Bharu made himself master of Hatur, while Lapal settled in the adjoining village of Shahjehanpur, which his descendants still hold. Seventh in descent from Bharn was Kalha I, who took service with a Delhi Emperor called Ala-ud-Din, perhaps the last of the Sayyid Dynasty, at all events in the beginning of the 15th century. Kalha founded Talwardi, to which place the family moved; and obtained an assignment of the malguzari of villages in the neighbourhood, for which he had to pay Rs. 1,25,000 of revenue, and also the title of Rái. The family maintained its position as a feudatory of the empire (zamindár or mustájir) under the Lodís and Moghuls for several generations, and one of the Rais is said by the family chronicle to have been put to death for refusing a daughter in marriage to the Emperor Akbar. On the decline of the Mughal empire from the beginning of the 18th century the Rais became involved in disputes with the Governor of Sirhind, and Rái Kalha III, who appears to have been a ruler of very great ability, extended his power up to Ludhiána, which passed into his hands a few years before the capture of Sirhind by the Sikhs in the manner described in Chapter I. B. After that event he established independent power over the whole of the Jagraon (the place of the Rais) and the greater part of Ludhiána Tahsíls, and also a large portion of the Ferozepore District. The family was on at least equal terms with the Pathan rulers of Maler Kotla and the Phulkian chiefs, with the latter of whom their relations were friendly on the whole. It was in the time of Rái Ahmad, successor of Kalha III, that Ráikot was built; and many other towns and villages, amongst them Jagraon. owe their origin to the family, whose rule appears to have been very mild. Rái Kalha III was the ablest of the Ráis; and under

LUDHIANA DISTRICT.

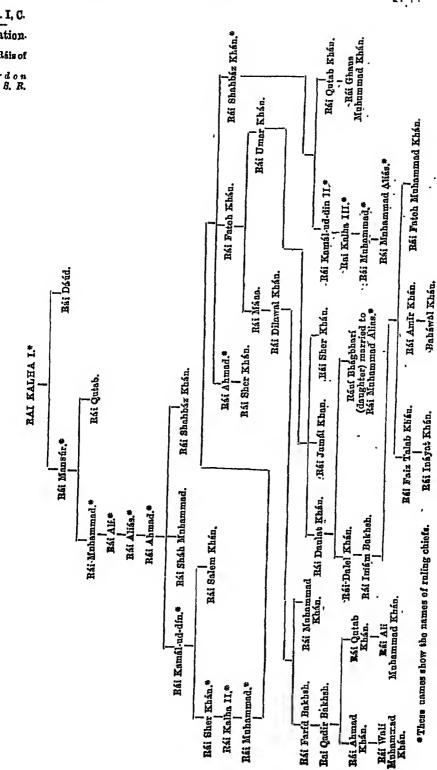
PART A.

him the family reached the height of its power. He was fellowed CHAP. I. C. by his son Ahmad, who ruled only a short time. In 1779 Rái Population Alias, a minor, succeeded, and the affairs of the State were managed by two Gujars, called Roshan and Ahmad, the latter of whom Raikot, asserted his independence of Jagraon, but was expelled. It was Gordon at this time that the Silks from across the Satler commerced their Welker, S. R. at this time that the Sikhs from across the Sutlej commenced their \$93. attacks under the Bedis; Roshan was killed in an engagement with them. The Bedis got temporary possession of Ludhiana and some of the country about; but Patiala and other cis-Sutlej powers took up the cause of Rais, and the Bedis were expelled. In 1802, Rai Alias was accidentally killed while hunting near Jagraon, and there were left of the family only two women, Nur-ul-Nisi, his mother, and Bhágbharí, his widow.

In 1806 Ranjít Singh made his first expedition into this part of the country; and without a struggle dispossessed the Rúnis of all their possessions, save two or three villages, which he allowed for their maintenance. On annoxation of the country by us, this jágir was continued to Bhágbharí till her death in 1854, whon it lapsed. The representatives of the family new left are Inayat Khan and Wali Muhammad Khan (vide Pedigree Tablo attached). Both have considerable possessions. The houses belonging to the family in Ráikot and Talwandi are in the hands of those gentlemen, &c. but with Hatur they have no connection.

Rái Ináyat Khan is a young man and is President of the Ráikot Municipal Committee; his fathor Rái Faiz Talab Khán was the President of the Municipal Committee before him, and was also an Honorary Magistrato and Honorary Civil Judge excreising 2nd Class powers in the Rúikot Thána. On his doath Rái Wóli Muhammad Khan was given the powers of a Magistrate of the 3rd Class (Honorary) and is also Honorary Civil Judgo trying Civil cases up to Rs. 100 in value (Thana Raikot). He is also zaildar of the Talwandi zail. Beth Rii Wali Muhammad Khan and Rai Inayat Khán havo considerable local influence.

Baháwal Khán, cousin of Rái Ináyat Khán, has recently obtained a direct Commission in the 8th Bengal Lancers and taken a dozen Rajpút recruits with him. This connection should be very beneficial to the family.



Some mention should be made of the Political refugees and CHAP. I. C. pensioners who followed us from Afghánistán in 1842 and had Population. Ludhiana assigned to them as a place of residence. The family of Shah Shuja-ul-Mulk have resided here since our withdrawal from Ludbians. Kábul in 1842.

Family of Shah Shuja,

Shahzada Muhammad Towahir is the leading representative of the family at Ludhiána. Sháhzáda Hamdam, son of Sháhzáda Nádir is a Tahsíldár, and Wála Gauhar, a District Judge in the Punjáb. Many of the descendants of the original refugees who have intermarried excessively are of miserable physique and few now are capable of earning their own living.

This family after the execution of Nawab Abdul Rahman Khan Jasjian was sent here after the Mutiny and have since resided here. None Namiby of the family is remarkable in any way.

Sáleh Muhammad Khán came with us from Kábul in 1842, and Family of was in receipt of Rs. 1,000 per mensem. His son Yar Muhammad Sileh Muhammad Khan succeeded to Rs. 500. There are only women left in the Khan. family who receive Rs. 120 a month. Muhammad Hassan Khán Muhammad (Kábul pensioner) distinguished himself in the Mutiny. He Hassan Khán had a pension of Rs. 800, and his family has now a pension of Rs. 200.

The well-known Mohan Lal (Agha Sahib) Hindu, Christian and Agha Hasan Muhammadan lived for many years hero and has left some descend. Jan. ants of various religions.

Religion.

The distribution of overy 10,000 of the population by religious Distribution DISTRIBUTION BY RELIGION.

as ascertained by religious.

	То	al.	Ur	Urban. Roral.		
Religiou.	1901.	1881.	1901.	1861,	1901.	1831,
Hindse Sikbe Jains Muhommadads	3,998 2,450 33 3,605	4,418 2,055 85 3,467	3,831 350 195 6,069	3,305 460 182 6,013	4,096 2,761 9 3,125	4,618 2,292 13 3,077

at the enumer- Part B. ations of 1901 and 1881 is given in the margin, increase o £ Sikhs, and, to a less extent. Muham-

madans at the expense of Hindús in 1901 was most marked. There were 415 Native Christians in 1901 as compared with 179 in 1881.

Soct.	=== 	1901.	1581.
Supple Shidhs Others and unspecified	 ***	983 11 6	991 8 1

The distribution of every 1,000 of the Muhammadan population over 15 years of age by sectisshown in the margin, CHAP. I, C. Gordon Walker, S. R. § 68.

The agricultural population of the eastern part of the uplands Population, is strong in the Hindu and weak in the Sikh element. Religion follows very closely the main division of the Jats, which is sketched above (page 53), and Sikhism has laid hold on those of the western parts and of the Jangal, while to the east the people are mostly Hindu.

Hindus and agricultu ra l popalation,

The Hindu population of the Jagraon Tabail is made up of the mercantile, trading and miscellaneous classes inhabiting the towns and following their occupations in the villages; and it may be said that the Jat population is entirely Sikh, the total of the Jat population in the Tahsil being about a quarter of that in the whole District. On the other hand, the proportion of Sikhs is very small in Samrála; and in the Ludhiána Tahsíl, to the east of the Maler Kotla road, most of the Jats are Hindús, while to the west of it and towards tho Jangal they are all Sikhs. From what has been said above of the two types of Jat it will be seen that the adoption of one religion or the other depends in some degree on the mental qualities of the people, which again are the result of locality; but the real cause of the spread of the Sikh religion in the western parts is that this tract was always beyond the power of the Muhammadan emperors, while in the villages round Sirhind it was easy to check it. The Jat of the east has little time for any religion, and we might expect the form adopted by him to be of a lower order, and more involved in superstition. He keeps his ancestors' religion as ho does their system of cultivation; and wants no change, having few ideas beyond his fields. Accordingly there are few fairs, of any note, in Tabsil Samrála. On the other hand the Jat of the west is independent in his religion as in everything else; and Sikhism is just the sort of faith that would commend itself to his mind.

Muhammadans.

The Muhammadan portion of the agricultural population is confined to the Bét and the country just over it, which they hold to the almost total exclusion of Hindús. They have also villages scattered over the uplands; and the Muhammadan element is very strong in the town of Ludhiána.

Bultanis. Gordon Walker, S. R. ₫ 69.

It is not necessary to enter into a detailed account of the various Hindu sects, but some mention may be made of the Sultanis, who make up the greater part of the Hindu Jat population. These are the followers of the Muhammadan saint, Sakhi Sarwar Sultán, whose tomb is at Nigáha, in the Dera Gházi Khan District. Mr. Ibbetson gives his date as of the 12th century. No one has yet been able to find out how and when the worship of the saint spread through this District; but it is said that the Jats brought it with them, and they may well have done so in the case of all immigrations within the last 300 or 400 years. It is probable that the belief spread eastwards in the 15th and 16th centuries, and that at the time of Gurú Govind Singh most of the Jats held it, the conversions to Sikhism being from it. The Sultanis are nominally ordinary Hindús, worshippers of Shiy or of Dévi; but it is charac-

teristic of popular Hinduism that the saint and his shrine, being CHAP. I. C. something more tangible than the deity, have entirely excluded the Population. latter, and that the saint should have been a Muhammadan. They are, as might be expected, very lax Hindús. An account of the Bharáis, or guardians of the village shrines of Sultán (pírkháná) has been given under Castes (page 54). These pirkhanas have always the same shape—a square base with four small domes at the corners, and in the centre a small temple 10 or 12 feet high. There is a door in front of the shrine; and, facing this, two or three niches for lamps. Otherwise it is empty, there being nothing to represent the saint. The Thursday offerings at the shrine are not universal, and are generally made by the women. The Bharáí attends all that day. It is very common for a person wishing to attain some object (e.g., to succeed in a law suit) to make a vow to the shrine; and offerings in this way also go to the Bharáí. Once a year, on a Friday, the ceremony of rot is performed in most Sultani families. A huge loaf is made of one maund (kachcha) flour and half a maund (kachcha) of gur, and cooked. The Bharái attends and beats the drum, and sings the praises of the saint while this is preparing; and receives one-quarter of the bread, the other three-quarters being eaten by the family and the neighbours. This is the great observance of the Sultanis, and they really appear to have no others.

One of the few fairs in Samrala Tahsil is that at Bhadla, which possesses a khángáh of Sakhi Sarwar. Here a fair is held on the 1st Thursday of the bright half of Jeth. A rot is cooked and distributed. Inside the khingah is a cenotaph of Sakhi Sarwar. Its management is in the hands of the Kumhars and Bharais of Bhádla in equal shares.

The Ludhiána District and adjoining cis-Sutlej territories figure largely in the annals of Sikhism. (1) Guru Nanak and his successors walker, S. R. made many converts in this tract; but it is more famous as \$60. the scene of the wanderings and persecution of the great Gurú Govind Singh; and it was here principally that the religion took its militant form from contact with the Muhammadans. Sirhind, the head-quarters of the Mughal power in these parts, is only a few miles east of the Samrala border. It was against this town that the earliest efforts of the Sikhs were directed; and it was here that after the dispersion of the Gurú's followers by the lieutonant of Aurangzeb, the wife and children of Govind Singh were murdered —a deed that has made the town accursed to all his followers. It is in this District, too, that the latest development of Sikhism has had its origin under Rám Singh, Kúka. The two religions of the Jats, i.e., the worship (for such it is) of Sultan, and Sikhism, do not really differ very much from each other in practice. ordinary Sikh of the District is a Hindu who reverences the Gurus and their Scriptures, and in token of this has taken the baptism

CHAP. I. C. (pahul), and adopts at least some of the signs enjoined by Gurú Population. Govind Singh. The Sultani is a Hindu who has inherited the worship of Sultán; but the more intelligent of them see the Sikhe, absurdity of this, and really believe in the Gurús as much as the Sikhs do. Sultánís are constantly taking the pahul or baptism, and the conversion makes almost no difference to them, except that they have to give up smoking. A Sultáni Jat will often sav that he did not become a Sikh because his father was not one, and it was not the custom of his family to take the pahul, but that his sons would be Sikhs; and he had really no better reason for his own form of religion, which he admitted to be foolish. Such a distinction as the manner in which sheep and goats ought to be killed for food is not likely to affect a people who never touch flesh, and really consider it a sin to kill any animal. The Málwa Sikh of the present day admits the Hindu gods, and follows the Brahmans in everything. He is very unorthodox on most points, but has taken the pahul generally from the hands of some holy man who has visited his village, less often at Amritsar. After this he adds 'Singh' to his name, if he has not taken it in anticipation, must renounce smoking, and keeps three out of the five 'k's' enjoined by Guru Govind Singh, viz., the kes or long hair, the kanga or wooden comb, and the kach or drawers. There is nothing approaching to bigotry in the disposition of the Sikh Jat; and so much of his faith as is not made of these few external observances, which are after all more of a social than of a religious character, is the religion of humanity preached by the earlier Gurús. A Sultáni will generally call himself a Sikh, and does not seem to recognize much difference between himself and the Gurú Sikh, except that the latter cannot enjoy his pipe. Sultan is attended to once in the year; and even this is a mere matter of custom. The Sultani will say that he reveres the Sikh Gurus; and no wonder, for the moral precepts of the Granth might belong to the purest form of religion. The real religion of both Sikh and Sultáni is a belief in one God, and in every-day life thore is blind obedience to the Bráhman.

Kúkas. Gordon Walker, S. R. § 61.

The most important of the recent revivals in Sikhism is that of the Kúkas, which is a protest against the present laxity, and an attempt to restore the political religion of Gurú Govind Singh in its purity. "This sect was founded about 50 years ago by an Udási faqir, an Arora by caste, called Bálak Singh, who lived at Hazro in the Attock District. His followers were called Sagiásis or Habiásis; after his death in 1863 the movement died away in the western Punjab, but it was energetically stimulated in the central and eastern Districts by his successor, Rám Singh, a carpenter of Bhaini in the District of Ludhiána. The tenets of the sect proclaimed Govind Singh as the only true Gurú, who prohibited all worship save the reading of his 'Granth' and all employment of Bráhmans, and in many ways, revived the original doctrines of the

Sikh faith. They included the abolition of caste and of restrictions CHAP. I. C. upon intermarriage, abstinence from meat, liquor and drugs, and population. comparatively free intercourse between the sexes. The sectaries carried staves about in their hand, tied their turbans in a peculiar fashion (sídhapág), wore a necklace of woollen cord tied in knots, and had a watchword known only to themselves. Rám Singh presently declared himself to be an incarnation of Gurú Govind Singh, and preached the revival of the Khalsa and the overthrow of the English Government. His followers used to meet by night for the purpose of drill, while, as usual in such cases, a good deal of religious hysteria was oxcited, and ended in much sexual license. The attention of Government was attracted to these proceedings as early as 1863, and shortly after this date the sect began to be known as Kiikas, or 'shouters,' a name which has now superseded their original designation. For several years these people did nothing worse than defile or destroy shrines and idols, and murder butchers and others whom they suspected of slaughtering kine; but as early as 1869 there was a small Kúka outbroak in Ferozepore which seems to have had a political object; and in January 1872 the Kúka rising in Malor Kotla took place, which ended in fifty of the ringleaders being blown away from guns, some thirty more being executed, and Ram Singh being deported. The sect cannot be said ever to have attained any general popularity; its followers have throughout been drawn almost exclusively from the lowest classes, their attacks upon sacred places have outraged the feelings of their neighbours, while the pure morality which they at first preached has been superseded by the most unbridled license under the name of religious enthusiasm, men and women dancing naked together and indulging in orgios which have alienated the sympathies of the more decent portion of the community." The above account of the Kúkas is taken bodily from Mr. Ibbetson's Census Report. To it the following particulars may be added: Rám Singh was born in Bhaini Ala, 14 miles east of Ludhiana, about the year 1820, the sen of Jassa, a carpenter. Ho was at one time in service in the Khálsa army at Lahore; and, on giving this up established a shop at Ludhiána. This failed, and he worked as a carpentor in his own village and at Ludhiana. Then he took to wandering about the country plying his trade; and finally became the disciple of Bálak Singh in Hazro. Whon he had ostablished some roputation, he sottled down at Bhaini botween 1850 and 1860, and thence disseminated his doctrines. The sect increased rapidly, and followers came from all parts never ompty handed. He was soon able to set up a largo déra; and at the time of his arrost in 1872 used to go about followed by a large retinuo and in groat state. It is very doubtful whother it can be said that even the majority of the Kúkas are drawn from the lowest classes, for the sect has made much more progress amongst the Jat Sikhs than any returns would show. The excesses committed by a small body of fanatics in 1872 were probably disapproved of by the sect at large. The principal

CHAP. I. C. outward signs of the faith are the straight pagri and the woollen

Ktikas,

Population, cord (mahla); but since the outbroak of 1872 (of which an account will be found elsewhere) the first of these is not worn by many Kúkas; and the cord is kept under the clothes instead of outside, as it ought to be. A dispensation from the déra (where Budh Singh, brother of Rám Singh, resides) is easily obtained; and it is evidently the intention of the sect to give up all the outward marks of their faith so long as they are persocuted. A Kuka would call himself a Sikh unless he were well known to be a Kúka; and probably only a very small proportion of the followers of Ram Singh have been returned as more than Sikhs, which of course they are. The truth is that it is not possible for a Kúka to be a loyal subject of the British Government, as the avowed object of Gurú Govind Singh, whose incarnation Ram Singh professes to be, was a temporal kingdom; and the establishment of this under Ram Singh is the first element in the faith of the sect. It is not to be expected then that any man, unless he were prepared to break with society and give his enemies a constant hold on him, would admit that he belonged to the sect; and most Kúkas would at the present time, even if asked the question directly, deny their faith.

Muhamcharacter of

The Muhammadans of the District are almost all Sunnis, 99 per cent. of them being so returned. No account need be given reli. here of the tenets of the three sects. The Jats, Rajputs, Gujars, Aráins, Dogars are all converted Muhammadans; and their conver-Walker, S. R. sion was probably forcible, so that we should not expect them to be very strict, or their religion to be more than skin-deep. They say their prayers when they have time; and generally keep the fast of Ramzan. The Muhammadan Rajputs are probably the most foolish in their religion, and most superstitious of all tribes in the District; and will believe in anything. The Awans came to the country as Muhammadans, and are strong in their religion, most villages turning out several Maulvis learned in the law. They are, like the other Muhammadan tribes, guided by custom on questions relating to land; but, after the Settlement Officer had attested their tribal code in 1882, a very strong representation was made to him to the effect that, although customs contrary to the Muhammadan law had established themselves, the tribe now wished to enter into an agreement for the future strictly to abide by the latter.

Pilgrimages and religious fairs frethe people Sakhi Sarwa Gordon Walker, S. R. § 63.

Mention has been made of the shrine of Sakhi Sarwar in Dera Gházi Khan. This is a very favourite place of pilgrimage quented by for people of both the Hindu and Muhammadan religions, but principally for the Sultani Hindús. Bodies of pilgrims start from the District in charge of the Bharáís in the month of Phágan (March), and return in Chet (April), the journey taking about six weeks is performed on foot, as it generally is. Offerings are made at the shrine, of money, clothes, &c., without any special ceremonies; and three or four days are spent there. A rot is often made (see page 83 ante). It is said that leprosy used to be cured by a visit to this

PART A.

shrine; but generally a man gets whatever he wishes by making the CHAP. I. C. pilgrimage, or goes on it to fulfil a vow.

Population.

Hindús of all tribes go from this District to the temple of Dévi at Jawalamukhi in Kangra. They are accompanied by their families, Devi while, as a rule, men only go to Sakhi Sarwar. There are four seasons appointed in the year for this pilgrimage, the principal ones being in March and Soptember. Offorings are made at the shrine, and the hair of the children cut off and left thero. Some also go to Naina Dévi : and the Sikhs reverence this shrine because Gurú Govind Singh spent some time at it. The road to Jawalamukhi lies through Hoshiarpur, and that to Naina Dévi through Ráhon or Rúpar.

Temple of

Hindús also go from this, as from other Districts, to the Hardwar fair, especially for the Kumbh, which comes every 12 years; and Amritan, and the Sikhs to the Harmandar Ji or temple at Amritsar, for the Baisákhi and Diwáli fairs, but not in any great numbers, and more probably with a view to purehase of cattle than of worship.

The next three places of pilgrimage to be mentioned lie in the Ambála District near Thánesar, within what is said to be the circle Phalga. where the last great battle between the Kaurus and Pándus was Kulchetar ("Kurukshetra"—Cunningham) is close to Thunesar town; and, when there is an eclipse of the sun, crowds of pilgrims go there and bathe, the day having been duly notified by the Brahmans. Pihewa is 12 or 14 miles further on; and a great fair is hold there on the last day of the Hindu year (Chet Chaudas), when the people bathe in the Sarusti stream, which runs close at hand. Besides this, when any one dies an unnatural death-by snake-bite, by accident, &c., in fact in any other than the orthodox way of being put on the ground—the funeral obsequies have to be porformed by the Brahmans of Pihowa, to whom presents are made. When the last day of the sorad or kanagat (the period of 15 days during which a Hindu worships his deceased ancestors) falls on a Monday, a religious fair is held at Phalgu in the Karnal District where there is a tank in which the pilgrims bathe. There is a constant stream of pilgrims to Pihewa, for a Hindu or Sikh must go there if the person whose obscquies he is bound to perform has died an unnatural death. All the Hindús and Sikhs of the District alike go to these three fairs, crowds of them to the oclipse fair at Kulchetar.

There is shrino of Sain Bhagat at Partabgarh which is frequented by the Nais of the adjoining villages. Sain Bhagat is hold in great roverence by Nais.

A few Muhammadans go to the fair of the saint Pir Banoi Muhammadheld at Sunam in Patiala; one in 10,000 goes to Mecca; a great an pilgrimmany go to Sakhi Sarwar, but the pilgrimage is essentially a Hindu institution.

The Chet Chaudas fair of the Hindus is held at four places in District Chet tho District-Ludhiána, Máchhiyárá, Badowál and Sidhwán. The Chandas,

CHAP. I. C. first three of these are over the Budha Nála, and the fourth close to Population. the river. Hindús come, bathe, walk about, and then go quietly home. Some 30,000 from the villages come to Ludhiána, and about 10,000 to Máchhiwárá.

Roshani Fair,

The Roshani Fair is held at the shrine of the saint Pir Abdul Qádir Jaláni (called generally "Pír Sáhib") which lies in the open space between the Fort and town of Ludhiána. This is a Muhammadan fair; but the Hindús of the town join in it. It is held on the 9th—11th of the Muhammadan month of Rabiussáni (called Miranji); and thus falls on a different date every year. Muhammadans come from all the villages round, make offerings, and pay their respects to the shrine. There is a peculiar custom of bringing cattle and keeping them tied up at the shrine all night for good luck, this being called chauki, i.e., the cow or buffalo 'watches' at the shrine. The fair is attended by 40,000 to 50,000 people from the villages; and the offerings, which are taken by a family of Súfis, amount to Rs. 300 or 400. The name 'Rosham' is derived apparently from the tomb being illuminated at night during the fair. A better account is that the shrine is that of Sayyid Muhammad, a khalífá of Hazrat Hujat-ul-Aulia, Shaikh Dáúd Gangú, who was, according to the Hadiqa Daudi, a contemporary of the emperor Alamgir and the founder of the Sufi dynasty (sic) of Ludhiána. His descendants became managers of the shrine and Sayvid Muhammad Ali Shah is its present incumbent. A much of some 160 acres in Jassiar is assigned for its maintenance.

A secondary fair is held (on the same day as the Roshani) at Raipur, in honour of Pír Daulat Sháh, whose disciples assemble there.

Bhain 414 Fair, The Bhaiwálá (Bhaibálá) Fair is held on a piece of wasto land of Dád, a village close to Ludhiána. It falls on the 10th Sudi of Mágh in January-February; and is in honour of a disciple of Gurú Nának called Bála. There is a samádh end also a tank; and Hindús make offerings of money, grain, &c., which are taken by the masands or guardians (Khatri Sikhs of Kudháni, in Patiála). The people also make curds overnight and take them to the fair, where they eat or distribute them after presentation to the shrine; and it is the duty of every one to scoop out seven handfuls of earth, originally no doubt with a view of increasing the size of the tank. The fair lasts one day, and some 10,000 people attend it.

The Sudiakhan or Chhappár Fair.

The Sudlakhan Fair at Chhappár in Ludhiána Tahsíl on the southern border of the District, is also an important one. It is held on the Anant Chaudas or 14th of the bright half of Bhádon (September) in honour of Gága; 11 and there is a large shrine, or mári, 12 in his honour. The local account generally given of Gága is that he was a snake, and changed his form to that of a man in order to

Fur un account of Guga, see Canningham's Arch. Survey XIV, pp. 79-86.
 Said to be from Persian mar, a snake.

1890 Vikrami.

marry a princess.(1) Afterwards he returned to his original shape; CHAP.I.C. but in the meantime acquired a great kingdom and won renown, Population. which has come down to the present time. The dhadis, or itinerant minstrels, make up stories about Guga as they go; and it is impos- lakhanor sible to say what he was originally. The fair is a Hindu one, but Ohhappir Muhammadans also attend; and some 50,000 people assemble. Fair. The cash and grain offerings made at the shrine are taken by the resident Brahmans, which amount to some Rs. 300 a year. Offerings of eatables are taken by the Mirásis if offered by Muhammadans and by the Chuhras and Chamars if offered by Hindus. As at the Bhaiwala Fair, the people scoop out earth from a pond near the mari seven times. Cattle also brought to be blessed as in the Roshani Fair. This is supposed to protect them from snakes. They are also kept for a night (chuaki bharwána) at the shrine. The shrine is reputed to have the power of curing snake-bite, and it is said that a person bitten will recover if put beside it. Perhaps this reputation is due to the traditions about Guga, in all of which

there is something about snakes. The shrine is said to date from

Gúga has an interesting mári at Raikot, where his twin cousins, sons of his maternal aunt, are worshipped on the Anant Chaudas or last day but one of Bhádon. North of the town is a small tank called the Rattowana. Here a mound of earth has from the earliest times been made for Guga'e propitiation, because close by is a large grove of karir bushes, the haunt of enakes. In 1841 V. was a year of portents. A snake took up a position on the mound and for two days the Chet Chaudas and puranmáshi refused to Huge offerings were made to it. A Khatri girl was possessed by Gúga, and declared that he wished a mári to be built to him there. At the same time a Khatri recovered from fever in response to a yow and accordingly built the mári, which has since fallen down, only a platform, a well and the serpent's hole (virmi) remaining. As many as 50,000 people used to frequent the fair, but Chhappar has supplanted it in popular favour and people only visit it on their way back from the fair there. The pujaris are Kale Bráhmans, once priests of the Ráis of Ráikot. Small fairs in honour of Gúga are also held at various places on the naumí (9th) of the dark half of Bhádon, or, in some places, on the 9th of the bright half.

In the Agwar Gujaran of Jagraon town is the shrine of Mohkam-ud-Din, a Rájpút of the Ambala District who appears

⁽¹⁾ The local legend avers that once a zamindár of Woherna stole a plough but lost his way and was cought next day. As soon as the plough was taken from him he received his power of seeing and as this theft occorred near a serpent's hole in Chhappar, Geoga Rám, a Bráhman of that villege, swept, plasfered and worshipped the wwmi. His son Sahib Rám bailt the shrine with some other Bráhmans, and the offerings are divided into 5 chares thus :— Gongo Ram's

descendants 2 shares.

The Sud-

Fair.

CHAP. I. C. from an inscription in the shrine to have died in 1913 (V. 14th Population. Phagan). Up to 1940 V. the fair only lasted one day, but since then it has been held for three days and nights, beginning on 14th lakhan or Phagan. Chhappár

An interesting tribal shrino is the Lachbman mári at Pabián in Tahsil Jagraon. The fair is held on the day after the Chet Chaudas. The Mallhi Jats thus describe its origin :-

The Mallbis have a large fair on the same date Chirk (the out-lying Sub-Tahsil of Kalsia State in Ferozepore) and the Malhis of Pabian claimed a share in the offerings made there, but the Mallhis of Chirk rejected their claim and so, about 300 years ago, the Pabián Mallhis sent their Mirási, Sháman by name, to purloin two bricks and two lamps from the Chirk mari. Shanan succeeded and with those bricks the miri at Pabian was founded in the time of Rái Qarár of Talwandi. The mári is a large dome of masonry, 22 feet square and 41 feet high with two storeys. It contains no image, only a platform of 10 bricks, 4'9" long by 3'8" wide. Round the mari lie some hundreds of bighas of waste land, the wood grown on which is not used by any one for his own purposes. A Hindi inscription of 1910 V. records the repair of the mark. All the offerings are taken by the Mallhi Jats. The village people visit it every Thursday and distribute sugar for rows fulfilled. At the fair people from a distance make offerings in return for prayers granted. Cattle are also cured by a night's vigil at the shrine. Inside the enclosure is a smaller dome, called the temple of Bhairon who was devotedly attached to Lachhman.

Bábá Manohar has a shrine at Hedon in Samrála Tahsíl where a fair is held on the 8th of Asauj in honour of Durga. The building is said to have been erected by Bábá Manchar.

Jingpar Fair.

The only other fair worthy of mention is that held at the tomb of Bure Shah, or Makiphan, a Hosain Shahi faqir of Talwara, who was born at Uch in Bahawalpur. It is held at Jungpur (Jagráon Tahsíl) in September (on the night between Asauj and Kartik) when the maize is ripening, to commemorate the anniversary of the saint's demise. It is a Muhammadan fair really; and Muhammadan fagirs collect from all parts, but Hindu Jats also come in great numbers. Mián Bure Sháh was reverenced for his sanctity and spiritual power by all castes and on his death in 1841 Vikrami, a shrine was erected in his honour. The present building was built about 100 years later by the Rúis of Talwandi. It also contains the tomb of Bibi Khushhalo, a Brahmani disciple of the Mian. Altogether some 10,000 attend. The fair is held at night, and the people light about 50 lamps at the shrine and make small offerings, which are distributed amongst the fagirs. Cattle are also brought to the shrine for a night's vigil. The present mujdwir, Sáin Nawázish Ali, is also a Husain sháhi and has a good roputation.

[PART A.

mandar in the village.

At Shahna, in the south of the Jangal tract, a petty fair called CHAP. I, C. Bibarian is celebrated twice a year, on the first Sunday in the Population. nauratrus of Asanj and Chet. People assemble at an ordinary

Bibarián.

Dharmidlas'

A great feature in the Jat villages of the uplands is the A great leature in the fact thinges of the uplants is one and charite dharmsala, an institution partly religious, partly charitable, in charge able instituof an ascetic or saidh of the Udasi or of some other order. This tiens, is endowed with a grant of land, either out of the village common, or from some private individual. It is the duty of the sadh to spend all that he gets from the land or by begging in feeding the poor, keeping sims houses. the langur or alms-house going. Where, as in most cases, the occupant is an Udási, he or one of his disciples (chela) also reads the Granth or Sikh scriptures. In the larger institutions of this sort tho sádh and his chelás make una college, the former heing called the Gurú or father of the chelies and the mahant of the institution. The chelies collect money and sometimes set up in other villages similar institutions, affiliated to the original one. In former times the reputation of these dharms thas was very great, and few villages were without one; but their treatment in our times has resulted in the closing of most of the old ones. The grants of land were of course intended for the support of the institution; and under Sikh rulo if a sadh misbehaved he was at once turned out. But at the Regular Settlement the incumbent was in every case returned as owner of the land, which was at the same time exempted from revenue for the period of settlement. The result of this has been that the still has in most cases taken a wife, closed the distrinction to the public and he or his children are now more lunded proprietors, with a very comfortable house built at the public expense. In some cases the sidh has not actually married, but taken to evil courses; and the people are powerless to provent his misappropriating the receipt. Mr. Gurden Walker quoted instances in which a diarmsala of great repute has thus been ruined by a prolligate salah who retained the land and house; and the villagers have netually had to create another endowment and build a new dharmsala. There was a very famous alms-house at classowal with endowments which amounted to several hundred acros, most of them unfortunately held revenue-free in perpetuity; and this has now fallen into the lands of a worthless character, and is closed to the public.

There are two or three famous langues or alms-houses well known throughout the country. That of Bagruin lies 40 miles langar. south of Ludhiana and is administered by a resident family of Tarkháns (called Bháis), who hold in jágir 2 or 3 villages in our territory and more in Patiála and the other states, hesides owning a large area of land. Numbers of travellors are fed daily from the public kitchen, which is open to all comors; and about 1,000 maunds of grain are distributed to the public amundly. dera, or building, is a very extensive one. The family has always been in the habit of marrying and the son succeeds as manager.

Thu Bágrián

The Bágrián langar.

CHAP. I, C. The present Bháí, Arjan Singh, is a gentleman of noto in his own Fornlation, large village of Bagrian. This langur is very well managed. It was kept open in the worst years of drought (1862 and 1868), when the smaller institutions throughout the country were closed,

and afforded relief to numbers of the poorer classes in the famines of 1897—1900 who flocked to it in search of food. There is also a large langar at Jaspál Bángar, near Ludhiána, which is kept by

a family of Udási fagirs, whose custom is also to marry. This is an ancient institution, the first endowment having been made in the time of the emperor Muhammad Shah, and successive rulers having added others, till they have grown to some 800 acres. The present mahant is Partab Das; and he appears to do his best to keep up the institution, which is held in great repute. His father

Gálab Dás is said to have died deeply in debt in consequence of

lanear.

his expenditure in keeping the langur open in the years of scarcity, The Heran (Jagraon Tahsil) langar is held by an Udási ascetic; and, although its endowments are not so large as those of the other two, it is almost as well-known. The late mahant, Gursarn Dás, is said to have distributed in the famino of Sambat 1917 (1862) 8,000 maunds of grain which his predecessor had stored, and to have invited the starving people from all quarters, sending no one empty away. The present mahant is Mukat Ram.

Observ a ne oss and super. atitions.

A whole book might be written about the religious observances, superstitions, &c., of the people; but it will suffice hore to refer to a few points, which will serve as illustrations of the popular forms of belief, and of the degree to which ceremonial observances still obtain.

Power af and priests.

Hindús and Sikhs, except Kúkas, are greatly ruled by Brahmans. Every one has a parchit or priest for every-day life, and a pada or superior priest (who must be a learned man, read in the Scriptures) for marriage and other celebrations. Whatever observances a Brahman enjoins must be performed; and there is often a good deal of tyranny, hard penances being ordered for trifling faults. The Muhammadans have not the same necessity for priests in every-day life; but it is scarcely their own fault that they are so free, for they would readily believe anything; and this appears to be the only point of superiority in their every-day religion over that of the Hindús that they are not allowed to indulge in rites and superstitions to the same extent.

Ecolesiastitration and Christian Missions,

The Chaplain of Jullundur visits Ludhiána occasionally. The cal administ church in the Civil Lines built by Government in 1882, at a cost of Rs. 5,237, seats 50 people. The Mission church stands in the Mission compound, and Presbyterian services are held in it.

The American Presbyterian Mission.

The following account of the well-known American Presbyterian Mission has been kindly contributed by the Rev. E. M. Wherry, D. D., Senior Missionary of the station :-

"The American Presbyterian Mission in the Punjab,' which is to be distinguished from 'The American United Presbyterian Mission in the

Punjab' was for 69 years known as the 'Ludhiana Mission of the l'resbyterian CHAP. I. C. Charch in the United States of America.' This title was recently changed to that of 'The Panjab Mission of the Presbyterian Church, United States of America.' The following are now principal stations of this Mission in the towns of the Punjab and United Provinces of Agra and Oudh, in the order can Presbyte-rian Mission, in which they were occupied: - Ludhiana, Sabaranpur, Sabatha, Ambaia, Juliandur, Lahoro, Debra, Hoshiarpur, Ferozeporo and Missouri. Tho Mission is controlled by a Board, with head-quarters in Now York (which also now controls the American Presbyterian Missions in the United Provinces and Western India with their central stations at Allahabad and Kolhapur).

"The Linkhiana station was the first point in the Panjab occupied by this Mission, having been established in 1834. It has out-stations at Khanna, Machhiwara, Raikot and Jagraon, in this District. The Rev. John C. Lawrie, D.D., the first missionnry, was unable to remain more than a year, and was succeeded by the late Rev. John Newton, the veteran missionary of Lahore, who arrived in 1835. The principal branches of the Mission work, besides preaching, are :- (1) the City High School for boys, established in 1834, with several branches in the town opened at later periods; (2) the Ludhiana Press Mission at which is published a weekly anglo-vornacular newspaper called the Nur Afchin; (3) n Christian Boys' Bourding High School, first established in 1875 or Lahore, but transferred in 1877 to Ludhiano. It was closed for three years, but re-opened in 1883. Extensive hulldings have been erected at a cost of Rs. 30,000. An Industrial Department line been added in which corporary, Persian rug wearing and tailoring are taught. A Commercial Department for teaching typewriting, stenography and book-keeping has recently been added. For many years an orphanago for girls and a dispensary with a missionary doctor io charge were kept up, but both these institutions are now closed.

"The church, organized in 1837, has now a community of native Christians 272 in mimher. The sons and daughters of this church are found in every part of North India, employed in other Mission Stations. Itinerant proaching work is extensively carried on in the District, and a good deal of work is done in the town by means of chapel services, street preaching, and teaching of women in the Zenána and Girls' Schools.

"In 1857 overy hailding connected with the Alission, except two dwelling-houses, was hurnt down by the mutineers from Influnder, aided hy the rabble of the town, but an indemnity was paid by the authorities, a tax being levied on the town for the purpose. Fortunately all the missionaries and nativo Christians escaped with their lives.

"A clumay wooden pross, the first over established in the Panjab, was brought out and set up by the Hev. J. Newton in 1835. Thus was founded the Ludhiana Mission Press, which publishes books in every language and script used in the Panjah. Since its institution in 1835 books, tracts, and the sacred Scriptures have been senttered broadenst over all parts of India, in Persian, Urdu, Rindi, Panjáhi and Kashmiri. Somo idea of the zeal of the missionaries may be gained from the fact that as many ns 25,000 books and tracts, with portions of Soripture, were given away at the Hardwar fair in 1844. Early in 1845, the press, with all the books in its depository, was burnt down; only the wooden press and a portion of the type escaping the fire. However, friends in India came forward, and contributed a sum, which not only covered the Rs. 20,000 lost, but was also sufficient to comble the missioneries to publish a number of books. During the three following years 68,000 volumes were published and now founts of English, Hindi and Panjahi typo wore obtained, so that the pross was enabled to undertake a large amount of work for the public,

CHAP. I. C. besides the books published by the Mission. Among the works thus

Population published for the public bonofit were the l'anjabi Grummar, idiomatic sentences in English and Panjabi, and a Panjabi Dictionary, published The Ameri- in 1854. These books were, until recently, the only ones available to can Presbyter officers who had to learn Panjabi, and for them they were indebted to the rian Missien. Venerable Dr. Nowton and the mertyled Junvior. In 1857 the press was again burnt down by the motinsers, and the depository on the Mission promises, with its many thousands of volumes for distribution, was reduced to ashes, its broken and blackened walls alone romaining. The greater part of the loss incurred at this time was however made good to the Mission from the indemnity levied on the town, and so in 1858, we find the press in full swing again. Since then its work has been carried on with scarcely any interruption. Books und tracts have been published overy year by the thousand under the auspices of the various Bible and Tract Societios, American and English. The first complete edition of the Now Testament in Urdu was published in 1865, and the whole Bible in 1868. The lutter year saw also a complete translation of the New Testament printed in Paujabi. Up to 1870 the Mission had supplied all publications, except the complete Scriptures, to missionaries, free of cost, the missionaries usually giving them to the people grais. A question as to the wisdom of this policy was thon raised, as it was evident that large quantities of Scriptures and tracts found their way into the bazars where they were sold as waste paper. The result of the discussion was that the policy of selling almost all the books at a nominal price, just onough to prevent their being purchased as waste paper, was adopted. It was expected that the number of books distributed would be much less than in previous years, but as a matter of fact the largest number of volumes (187,000) ever printed in a single year at Ludhiaua was issued in 1872. In 1873 the semi-religious newspaper the Núr Afshan, was started by the Rev. E. M. Wherry. At first it coutsived only 4 pages of reading matter, at first in Urdn, but was soon enlarged to 8 pages, and later it became an anglo-vornacular paper with 24 pages, 8 of which are in English. It has now a weekly circulation of about 500 oopies, and is read by all classos in the principal towns of the Province as well as in some distant cities of the Empire. Though a religious journal edited with special reference to the Muslim and Hinda controversy, it depends in part on non-Christian putronage, and, with the aid of an annual grant of paper given by the London Religious Tract Society, it is sopported at little cost to the Mission. The whole number of Scriptures and portions printed sinco 1834 in Urdu, Hindi, Panjábi, Persian, Kashmíri, Sindhi and other languages or dialocts cannot be precisely determined, but at the end of the first half century in 1884 the late Dr. Newton estimated the total number of pages printed at 267,000,000. (History, American Preshyterium Missions, India, p. 48.)"

"The present European staff is as follows:-Four missionaries and their wives, 4 unmarried ladies, 7 native ordained ministers, 17 native unordained preachers, 20 native Christian teachers and 10 non-Christian teachers. Since 1890 the Mission Press has been leased to Mr. M. Wylie, a native Christian geotleman, who has onlarged the plant at his own expense and is introducing steam-presses capuble of increasing the output by at least tenfold. This arrangement practically releases one European missionary for other forms of Mission work.

"The influence of the Mission upon the people of the town and Province has been considerable. A large proportion of the men in the town are now able to read and write the vornaculars, and multitudes can speak or read the English language as well. Pupils of the Mission are found

PART A.

many offices in the Punjab, and the first native Civil Servant (Covenant- CHAP. I.C.) of the Province was educated for College in the Mission High School. ssion Girls' and Zenána Schools were for many years carried on by the ssionary ladies, and to these have now been added many others under the Amerindu, Muhammadan and Government superintendence. Similarly three can Presbyte gh Schools, in addition to the two Mission High Schools already noticed, ve been established, riz., the Municipal Board School, the Arya and amia High Schools. The result of the school work and the influence of Press have been the awakening of thought in many minds. Prejudices ainst the Christian religion have been softened; while a fair degree of ccess in the way of conversions has been obtained."

Miss. M. R. Greenfield has kindly supplied the following acunt of the LudhianaZenána and Medical Mission :-

Ludhiana Zenaná and Medical Mission—" This Mission was begun in 67 by the Society for Promoting Female Education in India and the 1st, which, at the invitation of the Missionaries of the American Prestyrian Mission, sent Miss Jerrom to carry on Zenana and School work in is city. A Christian Girls' Boarding School was built, and carried on for any years, till financial difficulties compelled the S. F. E. to close it. This building has now been sold to the Committee of the North India chool of Medicine for Christian Women, for an account of which see napter III, Section I below.)

"Medical work was begun in 1875 among Zenana and School pupils nd became so popular that in 1881 the City Dispensary for Women and hildren was opened, followed in 1886 by a Branch Dispensary in Gill and 1897 by another Branch Dispensary in Phillaur. The Charlotte Hospital r Women and Children was opened in February 1889 and has 30 beds.
1903 there were 655 in-patients treated in this Hospital; and an agregate of 17,859 visits to the Dispensaries. On the dissolution of the F. E. in 1899 the sole responsibility of this Mission devolved on Miss reenfield, who had been in charge of it since 1879. It was, and is, dependent r support on friends of the work to whom an Annual Report has been bmitted since 1880. The present staff numbers eleven ladies, assisted by ible women, Zenana and School teachers, nurses, compounders, &c. In Idition to the Medical, Zenana and School work is being carried in the city and District."

For further particulars regarding Mission work in the District

iss Greenfield's 'Five Years in Ludhiana,' 1886, may be consulted.

Total opulation.	Urban.	Rural.
678,097	86,966	586,131

turiets.

137,806

otal actual [Agricul-

workers.

263,155

Partially

agricul-

torists.

4,206

Table 17 of Part B, shows the various orders of occupations followed by the people as given in Census of the people. Table XV to which reference must be made Part B. for further details. The figures in the margin show the distribution of the whole population between the towns and villages, and the numbers of actual workers, agriulturist and partially agriculturist, in the District.

Only those of the workers who are agriculturists pure and simple are returned under that name; many, however, of those returned as partially agriculturists depend in great measure for their livelihood upon the yield of agricultural operations,

CRAP. I. C.

In the cold weather the food of the common people consists of Population. cakes (chapátti) made of jourár (millet) or of maize, a mess of dál, or pottage of moth or mash (pulso), with some green sarson or gram cooked for vegetables (sag). With this is drunk lussi or butter-milk. In the hot weather bread made of wheat or wheat and gram mixed (berra) is eaton instead of maize or millet, with dal or pottage of gram. A man working in the fields will cat one small meal, generally the leavings of the previous day, with some lassi in the morning after he has been working a few hours, and a heavy meal at noon. This food is brought to the field by the women or children. If he is tired and hungry in the afternoon, as he generally becomes in the long days of the hot weather, another small meal is taken about 4 or 5, and the day's labour is crowned with a heavy meal by way of supper in his house after dark. An able-bodied man working in the fields all day can eat upwards of a seer of grain made into cakes (if he has nothing else to eat with it), the allowance for each woman and child being half seer or less. Vegetables of all sorts, pumpkins, carrots, and radisles, &c., are eaten when in season, and the amount of grain consumed is then less. The Bet people grow and eat kaddus, kakris and radishes, while in the Dhaia carrots, radishes and green sarson are the usual form of vegetable. The Dhaia people are very fond of a mess of Indian corn meal (alan) and carrots or sarson mixed, the grain being only about one-third of the whole. On the occasion of a marriage or other ceremony superior food is consumed, and a great deal of sugar in some form or other (gur, shakar, khand, &c).

> The following note regarding the food of the people was furnished by the District authorities for the Famine Report of 1879:--

> Wheat, gram, barley, jowár, Indian corn, form the staple food of the people of this District. The average consumption of grain per annum by a family of five persons is 45 maunds for agriculturists, and 33 maunds 30 seers for residents of towns. Agriculturists eat very little wheat, but live on gram, barley, maize, and jovár. In June wheat, barley and gram is consumed, and in November jowar and maize.

> The Jat eats meat of all kinds, except beef and venison, when he can get it. Fish is considered inferior food and people who eat it are looked down upon, though not outcasted. Hindus avoid goat's milk in the shrádh days, and no one but a Bráhman drinks the milk of a cow with black nipples. In fact such a cow is always given to The use of spirits and drugs is very uncommon amongst the agriculturists, who are a most frugal people. The Garewal Jats used to have a reputation for using opium and post, but the custom is disappearing with the last generation. The other Jats and the Bet people appear to be free from vices of this sort, except that the latter indulge to excess in smoking tobacco.

Dress.

PART A.

In the towns the Sads and some of the lower classes from down- CHAP. I. C. country consume a great deal of spirits; but the ordinary Hindu Population. and Muhammadan still considers it a sin to do so.

rood a n d menls.

The Civil Surgeon writes: "Infants are sucked at the mothers' breasts until they are 6 or 9 months old, great care being taken that no other food is given. In the 6th or 9th month a day is fixed on which a ceremony called khirchatsi takes place, when soft food such as rice cooked in milk is put into the child's mouth. Thenceforward the child is occasionally fed on soft food, hesides When a year old it is regularly fed twice a day with dall kirhari and milk. The feeding of children over me year old is not so carefully looked after, and the result is that dyspensia, dysentery and diarrhora carry off large numbers of them." There is, however, nothing in this account which explains the excessive mortality among female infants as compared with male.

The dress of the people does not differ materially from that Described of the other Phujah plain Districts. The Hindu Jat generally Jais, men. wears undyed clothes (one can scarcely call them white), made of home-spun cotton stuff. They consist in the simplest form of three articles, a turban of coarse cloth, a waist cloth (dhoti) and a childre or cloth worn over the shoulders, the last two being made of thoday or dhotay rather thicker stuff. These, with a pair of shoes made by the village chamic, constitute the simple and inexpensive wardreds of nimetentlis of the Jut population for tho greater part of the year. A Sikh substitutes drawers (kachh) for the dhoti. On the occasion of a welding a somewhat better dress is borrowed from a neighbour, who has been extravagant enough to purchase it, and some colour is shown in the pagei, the white cloth being tied over one coloured yellow (bosonti) or some shado of red (karsualhi, galái, &c.) or green, or both are coloured. The people coming from the Jungal with carts affect these coloured pogris, and the mixtures are often tasteful. In the winter tho dat has a blanket of wool, if he can spare Rs. 2 to buy it; otherwise he has a dolor or chautaki, a sheet of very thick cotton staff, double wove. In the latter case his outfit costs about Rs. S. A well-to-do Jut will have better stuffs and wear a short tight-fitting wai-teoat (kurta) and un anga or angarka, or loo-r long one over this and a pair of pajornes of country or of English cloth, his turban also being made up of two pieces (a raja on the tup of a pagri) of emperior cloth, often coloured. If he is a dandy or wants to appear better than his fellows, he will wear a black or colonred coat, made of thick or thin English stuff (broadcloth or ulpaca) according to the season; but this is a recent fashion, and the garment is called a "cont." Chagas are also worn.

The dat women wear positions (called suther) made of susi, Jat women's columned cotton stuff, and a chidar worn over the head and should- dress. ers, either coloured (young women) or uncoloured, made of para or

CHAP. I, C. dhotar, thick or thin cloth according to the season. This upper Fopulation, garment when coloured may be of dyed cloth, or of phulkári, i.e., worked with silk flowers, or of sildri, another form of silk work; most women also wear a kurta or waistcoat like that of the men, When going to another village, they wear a ghagra or petticoat above the trousers, and a choli or bodice of coloured cloth.

Muhammadan dress,

Of the Muhammadans the Gujar and Arain men wear a waist cloth (called tahmat) of uncoloured or more commonly of coloured cloth, or a lungi (a check or tartan). The pagri is generally white. A lungi is also worn over the shoulders, generally blue and white, or red and white. In the cold weather they wear a khes or chautahi of the same sort as the Jats. The women do not wear trousers, but a petticoat, generally of blue cloth, a kurta and a shawl, also of blue cloth. The Muhammadan Rajputs dress in much the same way as the Jats, seldom displaying colours. Their women wear pajámas, a kuria and a sheet (chádar) of white cloth. A well-to-do Muhammadan Rájpút dresses in almost exactly the same way as a Hindu Jat of the same class.

Jewelry.

Jewelry is called tagida throughout the District, the word zewar not being known. Amongst Muhammadans men never wear jewelry; and amongst the Jats only three pieces—necklaces made of gold and coral beads strung together (mahla), bracelets of gold or of silver (kangan), and rings of silver or gold with roughly set stones (mundri). The use of these is confined to such as are better off than the ordinary run; but a Jat will always borrow a pair of bracelets if he can on the occasion of a marriage. Boys up to 9 or 10 wear some ornaments round the neck. Jat women have generally a greater display of jewelry than Muhammadans, because they are fonder of show, and also because their husbands are better off and can afford to give them more. A Jat woman in a well-to-do village will turn out for a wedding covered with ornaments of silver, and here and there a piece of gold. The ornaments commonly worn are the same for all classes, except that Muhammadan women will not wear any on their heads. The following is a list of those in general use :---

Whore worn,		Kame.	Rescription,	Price.	
Held Brow	{ {	Chounk Phdl Bandidn Tavitridn	A silver boss wern on the top of the head A smaller boss of silver, wern one on each side of the head over the ears, A fringe of gold wern across the brow Amulets of gold wern henging over the	Rs. 9 to 15 1 to 2 30 to 60 6 or 7	
Eir		Dondidn Bálidn with pipalcate Dhedu with chumle or kánphúl. Bála ghungrinála	brow (six), Earrings and pondants worn in the ears, made of silvor.	7 to 9 12 to 15 2 to 3	

Where worn, Name,	Description.	Price.
		Re.
(Nath with chuth	Silver rese ring with gold pendaul, worn in the side of the nose.	20 to 40
rez ji Machli	Gold ring for the middle of the nose	10 to 15
(Loun;	A gold stud let into the side of the note	1 to 3
Tandira or his	Necklot of silver	15 to 26
11 30000	Necklace of nilver louds	7 to 9
ECE)	: Ditto of supers joined logother	15
(Chaubien	Ditto of square pieces of silver	10
Octru	Silver bracelet	20 to 30
Kangan	i Dillo	10 to 15
PD AND Chiefin	Ditto	20 to 60
ARUF, Penris		80 to 100
C Bledtand	Armlet	10 to 15
rrt , Binlan, tire	Silterankleia	15 to 20
ixora Ingustini ettalia ir	in fee, l'inger rings of oilser	1 102

The workmanship of this jewelry is of the roughest descriptions.

(The ordinary house of the Dhain (belonging to a Hindu Jut) Rosses: Inconsists of a deathi, or perch leading out of the lane. On one side larnal are of this the cattle are tied and fed at the khurlis, or troughs made of minds and mud; and on the other are the heds of the immates; or, if the house is a good one, and there is plenty of room inside, the earts are kept here. The deadhi leads into an open courty and (salar in Hindústáni here called bera) with the same arrangement us the deodhi, the latter being really used when it rains, and the cattle and men ordinarily preferring the open space. Facing the deadhi across the bern is the dillin or verandali, in front of the rooms (generally two) which are really the house. At one side of the dillán is the chaunka or rasoi, the place where the food is cooked; and at the other side is n koti or pre-s, which is the store-room of the house. The people live principally in the dtlin: and the rooms (kolci) are used for storing grain and all vuluables, brass dishes, &c., and one for the agricultural implements. This plan can be traced in all the Hindu Jut villages; but, while in some of those in Samuila Tabsil space is so scarce that the bere or countyard is represented by a mero opening a few feet square in the roof, and the whole house is but one room, the drodhi and back rooms having been united, in the Jagraon Talisil and langal villages the houses are very commodious, the courtyant wide and the dallin backed with four or five rooms. In Samrila the village site cannot be extended, and has to accommodate a much larger innuber of people than it used to. Many houses will be found to cover a space not more than 10 or 12 feet wide, and about 10 deep; and in this are crowded the family and the cattle. In Jagrion and the Jangal there is nothing to mevent the people spreading out, and they are continually doing to, often themselves

CHAP.I.C. keeping to the dwelling-houses inside and making a walled enclosing.

Population. with a substantial shed, for the cattle outside of the site. In the crowded villages the tops of the houses are much used; and for rangement. The door, learning against the wall. Every house has one of these, and the result is to make the passage through some of the villages very awkward for a horseman. The charri and maize stalks kept for fedder are stored on the top of the houses.

Hindús eonsider houses unlueky when they broaden towards the front. These they call Sher-dahan or bag-muha, those that broaden towards the back ganmukha-aro luoky. A house should have an even number of sides, an odd number being unlucky. Dwelling-houses should open to the south, but shops need not do so. Almost all the Jat tribes build an upper story or chaubira but the Nagra Jats of Gamrala consider that such story brings bad luck. When an upper story is built the beams and rafters of the upper rooms must not cross those of the lower. The rafters are named after the three gods Basturij (god of houses), Indar (god of rain), and Yam (god of death), the first rafter being called raj, the second ind, the third your, the fourth raj again and so on The rafters should end with the one called raj as this means prosperity, if the last rafter is called ind the house will leak, and no serious objection is taken if the rafters end with this, the second name of the series. If however they end on the last of the series, yam adversity and death are inevitable. >

When a family enters a house that has been vacant for some time bastu puja is performed, and if the house has never been used before the ceremony called griah pratishtha Hand-prints (thopa) on a well are signs of a joyous event.

Houses | of Muhammadans. The Muhammadan houses in the Bét have no deodhi but merely an open court surrounded by walls four or five feet high, into which the kotri or house opens, generally without a dalan or verandah. The cooking place, called chulian is roofed separately. On the bank of the river where there is constant danger of the house being washed away, the people live in huts made completely of thatching (jhao or dib grass), or four walls of mud have a thatching of this on the top of them.

Furniture.

The furniture of the houses is simple, and consists of a few beds, as many low chairs (called piri) as there are women, spinning wheels (charkha), cotton gins (belna), and a chakki or handmill for grinding corn. The women sit on the chairs when spinning, &c. The farming implements are all kept in the house. The grain is stored in the koti, which is a press made of mud against the wall, or in a bokhāri which is half sunk in the wall. These presses have an opening with a wooden door in the upper part, and things are put in or lifted out of them. The bharola is

a large cylindor of mud, used for storing grain only, with an CHAP. I. C. opening at the bottom, through which the grain is allowed to Population. run when required. These appliances are made by the women. In many houses wooden boxes will also be found, being used for storing clothes principally, also round ones of leather called patiar.

Furniture.

Utensils for

The cooking and other utensils of the Hindus are almost ontirely made of brass, the only ones of earthenware being the cooking and water jar (ghara) and a cooking pot for vegetables (taori). The common dishes are a prat or basin, in which the flour is kneaded; a gadwa or lotah, for water; a larger vessel of the same shape called dolni in which water or milk is kept for use; batlohi a larger vessel, and a gagar, larger still, made either of iron or of brass; a thali or plate, from which the food is eaten; and a katora or shallow cup from which water or milk is drunk. These dishes aro all of brass. The bread is cooked on the common tawa or griddle of iron. Kaul is a small cup of brass; kurchi a spoon of brass, wood or copper. These with a chimta or tongs, for arranging the fire, and a sandási or instrument for lifting a lotah off the fire, make up the usual kitchen utensils of the Jat. Taken altogether they represent a good deal of money. The Muhammadans use an earthenware cooking pot, which they call a handi. Their other dishes are of earthenware, or of eopper tinned amongst the better classes, and have different names from those of the Hindús. They use a kundli or basin for kneading; a tobákh or plate for eating out of; a piala (Hindu katora) or eup for drinking, made of earthenware. The copper dishes used are a thali or plate, a katora, a gadwa or lotak. The tawa or griddle is of iron, like that of the Hindús.

It is not necessary to give in detail the ccremonies and rites Faneral rites attending the death of a Hindn. These are observed by the Jats mooies. more or less fully; the body is burned and the phil or ast, i.e., the partially consumed benes of the hands, &c., collected and sent to the Ganges in charge of a Brahman, who receives a small fee in addition to his expenses, and also takes 8 annas or Rc. 1 to tho tirath parchit, or Brahman on the spot, who in return for this throws the hones into the Ganges, and notifies this fact to the relative by letter. The other relatives of the deceased go about their work after three days' mourning; but the sen or other relation whose duty it is to perform the obsequies is shaved and maintains the patrik or period of purification fer oleven days (Hindu Jats). After seventeen days the mourning is over, and the chief mourner celebrates this by a foast to the relations and to the Brahmans, the event being ealled a hannamah. Large sums are sometimes spent en this occasion. Like other Hindus the Jats keep the kanagat or sardd; and on the day that corresponds with that of the decease of the relation whose obsequies he has to perform, the chief mourner gives food to the Brahmans before he or his family eat any.

CHAP. I.C.

Amongst the Muhammadans the ceremonies are simpler. Population. body is buried with the service enjoined in the Qurán. On the third day and again on the 40th the chief mourner distributes alms (khairát); and on the first of these occasions prayers are offered for the deceased.

Daily life

The daily life of the ordinary cultivator is perfectly monotonous works though perhaps not more so than that of any farm labourer at home, rest succeeding toil for most days of the year. A marriage or a fair gives an occasional diversion. The people of the western parts have much more variety and less toil. The youth of the Jagraon and Jangal villages have several games, the principal of which are sawnchi and kabaddi. In the first of these, which is played throughout the Punjab, one man runs backward, and two follow and try to catch him, he striking them off with his open hands. Kabaddi is described in Forbes' Dictionary, and is a sort of prisoner's base. Wrestling is not common. More intellectual amusement is sometimes found in listening to songs sung by one of the people, or by itinerant singers (Mirásis or dhádis), who recite the tales of 'Hir Ránjha,' 'Sassi Punu,' or such others to the accompaniment of a fiddle (sáranyi) or a tambourine (dhad, dourn). But it is only in the rainy season that the ordinary cultivator has time to listen to these, for he is generally much too fired by the evening to think of anything of the sort. Occasionally a body of Nats or Bazigars (strolling acrobats) visit a village, and the people will collect to see the exhibition. But it cannot be said of the agriculturist of the District, Hindu or Muhammadan, that he is fond of any sort of amusement, for his hours of idleness are few, and time is never heavy on his hands.

Divisions of the day.

The divisions of the day are as follows:-

... Sunrise, Diodhala, Tijápahr, Afternoon. Cháhvela, lassivela Morning. Laudevela, ... 10 to 12 o'clock. Rotivela Athan Takala ... Erening. Dopalir ... Noon. Dhandulkán ... Dosk. Rát ... Night.

An account of the months will be found in the chapter on agriculture.

CHAPTER II.-ECONOMIC

Section A.—Agriculture.

In the immediate vicinity of the river is the mand or kachcha, CHAP.II.A. a strip of land annually flooded. Something occurs to divert the Agriculture force of the river from a certain point, and when the floods subside, a shallow deposit of silt is found covering what was before an General agricultural oxpanse of sand. The accumulation of silt goes on for a year or two, conditions. being assisted by the growth of dib grass (Eragrostis cynosuroides) Ret. which is generally followed by pilchi called hore jhao (Tamariz Gordon orientalis). When the deposit is about six inches in depth the land walter, S. R., is gradually reclaimed. The formation of this deposit is by no means uniform. A few years may leave three feet of first rate soil or the deposit may remain too shallow for cultivation and apparently good land is often abandoned by the people after a trial. The action of the Sutlei in this way appears to be mostly beneficial. The mand tract of the first 20 or 30 miles is probably one of the richest piecos of land in the country, and with the very slightest labour magnificent crops are raised in what is really virgin soil. Lower down to the very end of the District the silt is also most fertilizing, although the crops are generally of an inferior class: The river though a powerful is a capricious agent, and the saying Ek sál amír, ek sál fagir applies to the inhabitants of this as of any other rivorain tract. The cultivator may find, when the floods have subsided, that barren sand has taken the place of his fertile fields, and that he owns no land that will yield anything. In the older or pakka Bét the process of formation ceased long ago and the deposit of soil is generally three to five fect in depth, though in places the old river sand actually appears on the surface or is just concealed by a coating of soil. The soil of the mand is generally a stiff, moist loam of dark colour; and that of the pakka Bet of the same character, but drier and of a lighter tint, the proportion of clay being considerable. There is a great difference between the productiveness of the first 10 or 15 miles of the Bét and that of its western part, but this is perhaps due to the heavier rainfall in the former rather than to the quality of the land. The Bot is everywhere cut up by streams which convey the drainage to the river. In the rains these everflow and flood the country; but they are mostly dry for the rost of the year. In such a damp tract it was to be expected that in places impeded underground drainage should produce kallar or soil so impregnated with salts as to be barren. Thoro is some of this along the Budha Nala, and it appears hero and there all over the Bet, and patches of cultivated land may be found in which the salts have prevented the growth of the crop; but the evil is not widespread. It is worst about Núrpur in Ludhiána and in the adjoining part of the Jagraon Bet, where the course of the

CHAP.II.A. drainage lies in places away from the river, and the water cozes out Agriculture just under the high bank.

Soils of the Dháin. Wolker, S. R.,

In the neighbourhood of the high bank the upper soil is a poor light sand, shifting under every wind, and blown into hillocks. Gordon There is a good subsoil, however, and this will account for the very fair crops that are raised ont of what appears little better than a wilderness. This sandy tract extends inland 4 or 5 miles, the surface getting gradually more even and the soil improving. South of it in the main portion of the uplands, every variety of soil will be found, from a very stiff clay to the lightest of sand. In the half of the District east of the Maler Kotla road the prevailing soil is a stiff loam of darkish colour, with a good deal of clay, while to the west a much larger portion is light loam or sand. But in both parts sand occurs, though it is as described in Ch. I, Sec. A, confined in Samrála to two parallel ridges, while elsewhere sand-hills are scattered all over the face of the country.

Popular classification of soils. Gerdon Walker, S. R. 6 97.

There are a number of soils recognized by the people, and with appropriate names. Our Regular Settlement introduced an elaborate classification, but the names used were known in the country before this. The land round a village site is referred to as nidi because of its situation even in the Jangal villages, where there is no irrigation, and no soil so designated in the Government papers. Dákhar, applied to hard soils, is a term that has been in use from time immemorial in the District. In the uplands the Jat will divido his land into senju (irrigated) and maru (unirrigated). The latter he will, in speaking to a revenue officer, describe as tibba or ret, and sometimes as budhi if there is any appearance of sand to justify him; or, if the soil is a good even loam, he will tell you it is pilak which is a very coarse cakey soil, almost barren, and worse even than sand. If it is a good dark stiff soil, he will tell you it is rarra chilan or kallar. In a village with light soils the people will speak with apparent envy of the dákhar or clay loam of some other village, where the crops are so good; while the owners of this latter sort of soil sigh for the light lands (called resli) of their neighbours, which required little ploughing, and where the crops spring in the driest of years. In the Bet the people speak of mand or flooded land; rakar or kallar, hard land yielding little; passi, or soil in which the sand is very near the surface.

Classification adopted in formar and lements.

In the Regular Settlement the terms used were niái or land adjoining the site and heavily manured; dákhar, or hard clay soil; present Net rausti or ordinary loam; and bhur or sand. These when distributed over the irrigated and unimigated lands gave much too elaborate a classification. Thus in the Dhaia there were these classes of irrigated lands: Niái cháhi, dákhar cháhi, rausli cháhi, bhúr cháhi, and finally mobila chahi, or unirrigated land capable of being watered by a well. Of the Revised Settlement Mr. Gordon Walker wrote:-

> "We have simplified the classification as far as we could, and have divided all lands for assessment purposes into-Kor the Dhaia : (1) midi

cháhi or first class irrigated land adjoining the site; (2) other well lands; CHAP.II,A. (3) unirrigated dakhar, or rausli, i.e., loam; and (4) bhur or sand. The first of these is an artificial class, but the division of unirrigated lands Agriculture is a broad distinction, which the people themselves recognize. In the Bét Classification no natural classification was attempted; but the lands were recorded as adopted in (1) manured and ordinarily bearing two crops (dofasti), and (2) numanured, present Setbearing one crop (ekfasti). These divisions are quite enough for practical tlements. purposes, and I do not think that anything would have been gained by attempting a more elaborate classification. In the uplands I began by having a losses of university depends on the control of the con 3 classes of unirrigated lands; clay, loam (dichar), sandy loam (rausli) and sand (bhur); but further experience unluced me to combine the first two. In the Bet there is great uniformity of soil. Yhe only variations are when the land is newly formed (mand), where it lies low and is moist, or where the sand is near the surface (passi)."

In the uplands the lighter soils prevail along the high bank comparison and to the south-west of the District, while those of the eastern of the various soils. portions are much stiffer. Putting irrigation aside, the best soil is that which best suits the rainfall. A hard dakhar soil requires a great deal of rain, which it generally gets for the Kharif; but even this crop suffers from breaks in the rains. But the most critical period of the whole year is the time of the Rabi sowings. It is well known that a clay soil is capable of absorbing a much greater amount of moisture than a sandy one; but the former requires a very heavy rainfall to saturate it thoroughly, and dries much more easily, which is a very important point in this climate. Dakhar land requires to be thoroughly moist before ploughing is possible at all; and even if it has been reduced to a good tilth, and the rains have stopped too early, it will often be found to have lost all its moisture; and the cultivator knows he may spare his seed, for it will not germinate. If the moisture for sowings is good, and if the usual winter rains do not hold off and are also sufficient, the produce of dákhar will be much heavier than that of any other soil; but it is seldom that all these contingencies turn out as the cultivator would wish them to. On the other hand rausli or sandy loam is very safe for the rain crops. It requires little ploughing; and, though not capable of holding so much as ddkhar, retains moisture in the subsoil much better. For weeks after rausli land has been ploughed and rolled preparatory to sowing, it will be found that there is good moisture at a few inches from the surface. Thus the best soil of the District for rain cultivation is the rausli, for it is never without a crop; while, even in the Samrála villages with a higher rainfall than elsewhere, we find that every 4th or 5th year a great part of the unirrigated land has no crop, because sowing was impossible for want of moisture. Many villages have both light and stiff soils in their area; and this is the most desirable combination. Bhúr is often called sand, but it is really a shifting and sandy soil on a good subsoil. Bhur lands are poor, and the crops on them are in the most favourable years rather weak, but they have the advantages of needing almost no tillage and retaining what moisture they get

CHAP.II.A. most tenaciously in the subsoil. They suffer, however, in a year of Agriculture heavy rainfall, and in the villages along the high bank the crop is generally best when that of the lands further inland is drying or when no sowings have been possible.

Bad soils.

In the Bet, relt or the soline efflorescence, due to impeded underground drainage, is common along the Budha Nala, but not elsewhere, except to the west of Ludhiána. In the neighbourhood of Núrpur barren patches will be found in the wheat fields; while further west, in the villages surrounding the plain of Aliwal, the surface is encrusted with it, the land being apparently water-logged, as is proved by the large area under water which has oozed out of the ground just below the high bank under Bharowal. Elsewhere in the Bet and in the harder soils of the Dhaia, the land may show a tendency to saltness, specially in drainage lines, this being evident from the failure of the crop to gorminate; such soils are called chilan or kallar. Pilak is soil of a deep yellow colour, more or less unfruitful, and distinguishable by its tendency to cake. It appears to be composed of a large grained coarse sand, like gravel; and is the worst of all Dhaia soils.

Agricultura calendar, Gordon Walker, S. R. \$ 96.

The agricultural year begins with the Nimania, which is the first of the half-monthly fasts of the Hindús, and falls about the 15th June. Lands are rented and accounts cleared up by this date, and generally a new start made for the year. Most of the land has been enjoying a rest of 2 or 3 months, the exceptions being where sugareane, some of the eotton, and patches of tobaceo and vegotables round the wells occupy portions of it. The monsoon breaks from 10 to 20 days after the Nimánia, towards the end of Hár; and agricultural operations commence at once with the sowing of the various autumn crops, except the cane and cotton which are already in the ground. Falls of rain at intervals during July-September bring the autumn harvest to maturity; and in September the final ploughings for sowing the Rabi crops (the land has been earefully prepared before) commence. From the middle of September to the ond of October the Rabi sowings go on, and from the end of October to the middle of November the Kharif grain crops are reaped, and the cotton pickings begin. This period of two months (15th September to 15th November) is much the busiest time for the cultivator. If the rainfall has been good, the Rabi sowings are completed early in November; but, if the rains have ceased too early, and there is not a sufficient amount of moisture for the sowings, they go on into December, and a late shower in October or November is then of tho greatest use. The benefits of a fall at this time are celebrated in the popular couplet:—Je mính pia Díwáli, jia phus, jia háli. 'With rain at the Diwali (end of October), a worthless fellow and a good cultivator are on equal terms'. The Rabi crops are brought on by showers at two periods of the cold weather, about Christmas and towards the end of February; and reaping begins from the Baisákhi day (1st Baisákh, about April 15th), and the threshing is

completed early in May. The sugarcane crop will not fit into the regular round of the farmer's year, and requires a special course of its own. It is sown in March, is cut and pressed after the middle of November, when the other Kharif harvesting and the Rabi sowing calendar. have been finished. Cotton is sown before the regular Kharif seed time, but it fits into the harvesting season, being picked at intervals during November—December. during November-December.

The following is a calendar showing the ordinary round of agricultural work of the year :-

	NAME OF MONTH.		of Montu.	State of the dealers.	
No.	Veroacni	ar.	English.	State of Agricolture,	
1	Cbet		March-April	Onne planted up to 15th. Cotton sowings all through the month; also melons up to 15th. Wheat crop irrigated once; and if rain folls, noirrigated lands ploughed for next Rabi. At the end of the month serson and then	
2	Baisákk	•••	April-May	barloy reaping begio. All Rabi crope ripe; gram, berra, wheat, reaped first in unirrigated and then in irrigated londe Threshing begon. Cotton sowings and cane watered all through the mouth.	
3	Jéth	•••	May-Joce	Threshing completed, and grain and etraw stored. Cotton sowings and cone watered.	
4	Hár	•••	Jnno-Jnly	Cotton cowings completed by 15th and cone watered. Rains commence by the middle or and of the month; and one or perbaps two ploughings for the automn unirrigated crop given; and one in the land intended for the Rubi, san sown, and moth, charri, etc., cowinge	
Б	Sowan	•44	July-August	commenced. Maize sowings commenced, and all Kharif sowings should be completed by middle of the month. Then the ploughings for the Rabi commonce, and three or foor giveo. Khorif well crops watered if occessary.	
6	Bhádon	•••	Augost-Soptember	Plooghings for the Rabi and Kharif crope wotered if necessery.	
7	Assoj	•••	Scptember-October	Rubi sowings begin in unirrigated lands. Gram from 1st to 15th, and then berra (wheat or barley with gram).	
8	Kátak		October-November	Rabi sowings continued and completed, the irriguted lands lust of ull; and by the middle of the month Kharif harvosting commences. Cotton picked all through the month. Kharif crops waterod in these two months as	
9	Magar	•••	Novomber-December	necessary. Late Rabi sowings. Kharif crops threshed in first bolf of the month. Cotton pickings go on; and cane pressing commecces towards	
10	Poh		Docombor-January	end of month. Cotton pickings completed, and cane cetting and pressing goes on. Rabi crops irrigated.	
11	Mógh		Jancory-Fobruory	Cano cut and pressod: Rabi crops watered. Lands plonghed for cane and for next Rabi if rain falls.	
12	Phágan	•••	Fobruary-Murch	Robi crops watered; cane and cotton sowings commonce from the latter end of the mouth.	

CHAP.II.A. Agricultural and implements.

The area that can be worked by a pair of bullocks depends on Agriculture a variety of circumstances. Thus in the Bet the cattle are very poor, and cannot cover much land; and besides this a great part of the area in the upper Bet is cultivated twice every year. In the uplands it is the wells that make the difference, and, of course, the superior cultivation at them. In the Bét it appears from the returns that there is a pair of bullocks to every 6 or 7 acres of cultivation; while in the eastern and highly cultivated uplands the avorage is 8 or 10 acres; and in the Jangal it is about 17 to a yoke.

Particalar operations: ploughing. Walker, S. R. \$ 107.

The operations of agriculture differ in the various parts of the District according to the crops grown and the presence or absence of irrigation. In irrigated lands preparation of the land for a crop by ploughing can begin at any time. The field is flooded and allowed to dry partially, and then ploughed 5 or 6 times in succession. This is always the method of preparation for maize and wheat; but for cane the land is fallow (sauce) during the cold weather; and it is often ploughed like unirrigated lands with the aid of the winter rains. For cane it is said that 8 or 10 ploughings are necessary, and as many as 15 or 20 may be given. Maize generally gets 5 or 6 and wheat, 4 or 5 in irrigated land. Where the two years' course is followed in unirrigated lands, there are 3 recognized seasons for ploughing. When the rain falls in Migh (January-February) the field from which a crop has been taken in October is ploughed twice in opposite directions and left open to the action of the elements. If subsequent showers fall the cultivator may plough it again; but he has seldom time to do this, at all events where sugarcane is grown. The next ploughings commence when the rain falls in Sawau (June-July); and the land then gets 3 or 4 at intervals, being reduced to a good tilth, and then smoothed with a soliaga to keep the moisture in. In Bhidon, when the time for sowing approaches, one or two more ploughings are given according to the nature of the soil. The cold weather ploughing is well recognized by the people as the most important operation of all. The great increase in the fertility of the soil produced by its exposure to the air is easily explained on chemical grounds. The following popular couplet describes the value of the ploughings at the various seasons: Siál soná; Hár rúpa; Sáwan sawen rawen; Bhadon be baguchia: tain kiún baha thia luchia, i.e., ploughing in the winter is gold; in Har, silver; in Sawan, indifferent; in Bhadon it is repentance: what is the use of your going about it, you lazy rascal? Where, as in parts of the Bet, the two years' course is not followed, winter ploughings are not possible. For the Kharíf only a couple of ploughings are given in the Rabi stubble, the seed being sown with the second. Ploughing is always commenced in unirigated lands a few days after the rain has stopped, when the land is beginning to dry, this condition being called vatar. Three bullocks are usually taken out to the fields for the work, one always being at rest. The plough does not generally go very deep; in the winter ploughing, 6 or 7 inches; but in those of the rainy season

PART A.

the tilth produced is not less than 8 or 10 inches, the plough going CHAP.II.A. deeper each time. Agriculture

Cultivation

The Settlement Officer thus described the system of cultivation on wells in the Dhaia:—"The cane is planted (March-April) and at the wells watered at intervals. Then the fields for cotton are treated in the same way, and most of the crop sown before the rains in April-June. When the rains begin it is time to sow the maize, and this is done from the middle to the end of July in land prepared in the same way as for the other two crops. The maize fields are those noarest to the village and the richest, what the people specially denote as nidi, or land adjoining the site. The tilth produced by the preparation for these crops is very fine, being the result of successive ploughings and rollings. When the seed has been put down the field is banked off into small divisions (kiáris) with a rake (jindra) for the purposes of irrigation, each of these being flushed with water in succession. This closes the Kharif sowings in irrigated land. After the first one or two waterings the fields are in the case of all three crops carefully hoed, the cultivators working through them steadily in a line, removing grass and weeds and loosening the earth, which is apt to cake from the watering and stop the growth of the plant. The amount of irrigation which these crops receive depends on the character of the rains. The cane has to be kept alive through the hottest part of the year, but luckily it is the only crop to be attended to then. After the rains have commenced the well has to be turned on whenever there is a break, and the necessity is more constant towards the end of the hot weather. It is when these crops have grown to their full height that the Samrala and eastern Ludhiana yillages look their best, being surrounded to the distance of 200 or 300 yards by a magnificent growth of maize and cano eight or ten feet high. The maize is ripe by the end of October, and is reaped in the beginning of November. The sugarcane is generally ready for cutting about the beginning of Docember, and the cutting and pressing go on into March. The Rabi sowings of wheat and barley in irrigated lands are made in the beginning of November. oither in fields near the site which have just borne a crop of maize or on more distant ones which have been lying fallow (sanwe) during the Kharif. If there is not sufficient natural moisture, a watering is given from the well, and this is generally necessary. Several ploughings in succession produce, as in the Kharif, a fine tilth, and the seed is sown broadcast, ploughed in, and the land rolled and banked for irrigation. The crop gots one watering a few days after sowing, and others at intervals till within a short time of its ripening, the number of waterings depending on the amount of rain. The Rabi is off the ground by the end of April and is followed by small patches of tobacco, onions, &c., which grow in April-Juno; but most of the land not under sugarcane is left alone for two months till the rain falls. When land bears two crops in the year, (or the equivalont one of cane) it is called defasli harsala, i.e., bearing two crops

CHAP.II, A. every year. Whore a fallow is usually given, the system is ekfasti Agriculture harsála, i.e., only one crop in the year is grown. This description of irrigated cultivation will apply to villages in the Jagraon Tabsil if we cut out the sugarcane and cotton."

Other operations: sowing, Gordon

Sowing of the ordinary grains is done either broadcast (chatta) or by drilling through a tubo (tor) into the furrows. The latter Walker, S. R., method is almost invariably employed in uninvigated lands, where it is desirable to got the seed well undor the surface in contact with the moisture; but there is no fixed rule in the matter. In irrigated lands and in the mand Bet the sowing is broadcast. The people will tell one that in former times when there was plenty of rain this was the case everywhere. The Kharif crop is sown broadcast, more ofton than the Rabi. After sowing the furrows are generally left open, always so in the western parts; but in Samrala Tahsil the field is sometimes smoothed. Maizo and cotton are sown grain by grain by hand. Maizo, it is said, should be so widely sown as to canble a man to run between the stalks. Tho method of planting cano is described on page 118 below.

Hooing.

Hoeing (godi, gudna) is done with a ramba or trowol, the worker going through the field in a sitting posture, carefully cutting out grass and weeds and loosening the earth round each plant.

Hedging.

The lands round the village site are always carefully hedged in the Dhaia with kikar or ber branches fixed into the ground, and tied together with a rope of cano stalks which have been passed through the press (thathe). These hedges are strong, and keep out the cattle very well. They oxtend along the sides of the various roads leading to the site, and enclose the whole of the irrigated fields. At certain points there are openings with stiles to enable the cultivators to get to their fields. The people are more careful than in any other neighbouring District about keeping animals out of their fields. Each plot or collection of fields of sugarcane has a strong hedge of its own. The unirrigated lands are generally quite open, oxcept in the Jangal villages, where the traffic is often kept to the roads by thick hedges of the prickly mullah or wild ber. In the Bet there is not much hedging of any sort, but the nidi lands are more or less protected according to the disposition of the people.

Cutting, stacking and threshing.

Cutting is done with a sickle (dátri). The cuttor goes through the field in a sitting posture, laying down the handfuls as they are cut. Those are afterwards tied into sheavos. Maize and jowar are collected in a stock (mohára) in the field, the stalks standing upright. After a few days, as the cultivator has time, the heads are pricked off, the maize husked and collected in a hoap, where they are beaten with a straight stick till the grain leaves the cob or head. The stalks are stored for fodder on the house-tops or elsewhore. In the case of the other grains the sheaves are collected in the field, the stack being called lahan, and thenco taken to the khaludra or threshing floor at the village, generally on a cart,

PART A.

The place selected for threshing is the hard, beaten ground, such as CHAPIIA. is found in the goerah of most villages. This is swept clean, and Agriculture the crop is spread out on it in the form of a circle to the height of two or three feet, and the phala or thresher drawn round and round stacking and it by two bullocks driven by a man or boy sitting on it. By the threshin. action of the phala and the trampling of the bullocks the straw is broken up fine, and the grain separated from the heads and husk. The phala is a square frame made of four sticks, each about three feet in length, and joined at the corners. The inside is filled with kikar or ber branches, covered with one or two sheaves of corn, on the top of which the driver sits. For winnowing a breeze is required. The mixed grain and straw is first tossed into the air with a pitchfork (salang); and the grain separated from the straw. But with the grain a good deal of straw and chaff is still left; and to get rid of this the grain is taken up in a winnowing basket called a chhaj, and allowed to fall gradually from above the thresher's head, the wind blowing the remaining straw and chaff away from the grain. Of all the operations described in this paragraph this last is the only one which the cultivator does not invariably do for himself. The ordinary cultivating proprietor employs no field labour. His women bind the sheaves, and he does everything else himself; but it is the custom in places for the Chamár or Chúhra to work the chlaj. There is none of the waste on reapers' wages and other allowances, such as prevail in many Districts. Even the village menials receive but a scanty share of the harvest.

The implements at the command of the agriculturists are few Agricultural in number and of the simplest character; but by their means the implements. Jats, and few of the better cultivating Muhammadans, too, are able to show an agriculture that will bear comparison with that of most countries.

The plough (hal) universally used is the mona (see "Punjab Agricultural Manufactures," p. 314), which is decidedly the best of the two implements and upplianpatterns in use in the Province, being much stronger than the other. cos. It is of course a primitive implement, with no mould board and no walker, S. R. turning action; but it opens the soil to a depth of eight or ten § 103. inches, and produces a fine tilth. The various parts of it are called mona (the block), thail or arti (the handle), phála and cháo (share and coulter), halus (beam). The bullocks are yoked by a panjali, or frame-work passing over their heads into which the halas is fixed. To the plough is attached, when necessary, a por or tube made of bamboo hollowed, with a leather mouth, through which the seed is drilled. Ploughing is followed by rolling with a solaga, a beam of wood to which the cattle are yoked, the men standing on it and driving. The solidge is also used in stiff soils for clod crushing. Paráin is the goad for driving the bullocks. Jindra is a rake without teeth, worked by two men, from one side with a handle, from the other with a rope. It is with this that the irrigated lands are ridged off into kiáris or plots for irrigation. The kahi or mattock is mostly

CHAPJI, A. used in making the irrigation channels (adh). The hoeing is done

Agriculture with a ramba or khurpa, a trowel with a crooked handlo. The crop is reaped with a data or sickle, and throshed with a contrivance called phalla, and winnowed by being thrown into the air with a pitchfork and applian (salang) or from a basket called tangali. The other chief implements are the salang, a wooden fork with two prongs used as above, and also for making up hedges, &c.; tho kard, an iron rake or cutter, used in place of the jindra and worked with bullocks in very stiff soil for levelling, &c.; the kohári or common axe for cutting wood; gandása, an axe or chopper with a long handle, the blade being a thin pioce of iron about an inch wido and six inches long fastened to the end by two spikes of iron; a gaudási, the same with a short handle for chopping fodder; a gandala or stick tipped with iron for making holes into which the branches set up in the hedges are set. The principal parts of the well-gear are the charge or buoket; the lao or rope with which it is raised; the paoni and kohir wheel on which the rope works and fork in which it fits. Water is raised from tanks, &c., by a baskot lined with leather worked by two men with ropes (called dal). The sugarcane press is called a belna or kulharı, and a description of it will be found elsewhere. Small carts are used by most cultivators for bringing the harvest. from the field, carrying manure, &c. They are of the ordinary pattern of country carts, but do not go beyond the village.

In practice 20 or 30 acres are cultivated by a partnership,

Agricultural partnerships. which may be temporary, the land of the several proprietors being

separately owned; or the holding may be really a joint one, belonging to a family containing five or six able-bodied men. A partner is called a sánjhi: the sánjhi may contribute only his labour, in which case he is called ji-de-sanjhi; or he may also contribute cattle, when he is called sanjhi simply. The share of produce that the sanjhi receives would depond on what he contributes, each man and each beast counting as a unit in the calculation. Thus a proprietor may have three bullocks and the sánjhi one; and they would together make up two ploughs in unirrigated lands. The sánjhi would in this case get two out of six shares in the produce or one-third; and the proprietor would probably pay the revenue and supply the seed, &o.; but this is a matter of agreement, and the terms vary a good deal. Sometimes several proprietors olub togother for the better working of their well land, jointly irrigating the fields of each in turn. It would not be possible for one man to take his own turn at the well, which requires at least four bullocks and three or four men at a time. This gives the result that large patches of cane, maize, &o., are grown, several fields being clubbed together for each crop. In the Jangal villages, where agriculture is in its simple stage, things are different. The division of the cultivator's labour is easy enough, and the task of cultivation is very light. From July to November the cultivator Gordon is more or less busy between sowing and reaping the Kharif, and preparing the land for and sowing the Rabi. But with the Rabi in

Gordon Walker, S. R., § 127.

§ 111.

the ground there remains almost nothing to be done till it is reaped; CHAP.II.A. and after that absolutely nothing for some months. In Jagraon, Agriculture where there is not much irrigation, the labour is also light. But Agricultural in the highly cultivated villages of the east of Ludhiana and in partnerships Samrála, the work of cultivating a holding is incessant, and wearying alike to man and to beast. There is no rest all the twelve months except for a few days in the rains; and there is so much to do about the months of October-December that the cultivator often finds that he cannot get through it all; and loses his chance of sowing his Rabi in time, or neglects some other operation.

In the Dhaia unirrigated lands there is a very well established Unirrigated system of cultivation. To explain it, we must begin with land phase coultivation. The from which a Kharif crop has just been taken. When the rain two years' falls in Magh (Jany.-Feby.) the field is ploughed and left open to correct of a r the action of the clements. If the cultivator has time, he may Walker, S. E. plough it again whenever there is a fall of rain, but it is not often \$105. that he can do this. When the autumn rains fall, ploughings again commence in July, and the land gets a number of them in succession, and is prepared for the Rabi sowings, having had a year's fallow, and being reduced to a very fine tilth by the final ploughings in September. Sowings ordinarily commence from the middle of September, the gram being the earliest crop in the ground. and being followed by wheat and gram (mixed), wheat, barley, in this order; they go on in ordinary years till the beginning of November, and till much later if the rainfall is bad. The fields are weeded at intervals, piázi, thistles, &c., being carefully removed. The crop ripens in April, and harvesting begins about the Baisakhi day (10th-15th April), a little being done before that. When the monsoon rains begin, the land out of which this Rabi crop has been taken is ploughed once, and the Kharif pulses and millets sown in it is without further preparation, as none is really necessary. The Kharif ripens at the end of October. The course of cultivation sketched above extends over two years, in the first of which the land bears no crop, although really the Rabi of one year is followed by the Kharif of the next: but of course the whole of a cultivator's land does not go through the various stages at the same time. Part of it will be under crop at the time that the rest is enjoying a fallow. The manner in which the lands of a village are generally distributed amongst the community will be noticed in the Section on Tenures (Chapter III), each sharer having a portion in each of the blocks into which the lands are divided, and his field being scattered all over the area of the village or sub-division. It is obviously convenient for the people of adjoining fields to have their land under crop or fallow at the same time, and in fact the members of the community always pull together in this matter, with the result that the village area will be found mapped out into blocks of fields which are either cropped or fallow at the same time. In small villages there may be only two such blocks, but there are usually a good many. Besides the

CHAP.II.A. advantage of the system as best snited for the land, it has others Agriculture incidental to it, such as the convenience of being able to graze the eattle over a large piece of fallow, and the facilities for watching the erops.

Other eveterus.

This system of cultivation (which has been named dofaslidosala, or the two years' course, the land yielding two erops in two years) may be said to extend generally over the Dháia; but in the light soils immediately over the ridge or high bank (the Lower Dhaia Assessment Circles) the area under the Rabi is much larger than that under the Kharíf, because for various reasons the former

Rotation of Walker, S. R.

§ 100,

found to pay better and a large proportion of the land is under Rabi every year (chfasli harsála). In the Bét and other places, where this course is not followed, there cannot be said to be anything resembling a rotation, for there is only one crop to be grown. In irrigated lands there is very little approach to what could be called a regular course, for the crops here too are limited Still the people very seldom grow their sugareane in the same field year after year; but prefer, if possible, to have it following cotton. Some fields have undoubtedly been producing maizo followed by wheat or barley, for centuries one may say, but the area so treated is limited to the fields touching the site. An ordinary manured field will generally go through such a course as this :-

Yoar,		Rabi,		Khorif.		
First Second Third Fourth Fifth Sixth	00 C 00 C 00 C 01 C 00 C 00 C	100 100 100 100 101	111 111 111 111 111 111	Fallow Fallow or fodder crop Fallow or fodder crop Fallow or fodder crop Fallow Wheat))4 1)1 1)1 1)1	Gotton, Canc. Cotton, Canc. Mnize. Do.

Outlying fields are not so heavily cropped as this; and those in which maize and wheat are grown do not generally bear cotton and cane. In fact the cultivation of the two sets of crops is kept quite separate on many lands. Of the total crops harvested in 1900-01 14 per cent, were grown on twice cropped land.

In the Bét the dofaslí dosálá system of eultivation is followed waker, S. R. for unmanured lands in villages at a distance from the river: but even here the area under wheat is larger than that of the Kharif. In this case all the land in turn is generally put through the two years' course. Thus a field will bear a Rabi for three or four years in succession, and then this will be followed by a Kharif, to which will succeed a year's fallow. In the moister lands near to the river a Rabi is grown year after year. The unmanured Kharif crop is nowhere of much importance in the Bet. The newly recovered lands in the mand are ploughed up roughly the first year; and massar or some other poor crop sown, often without removal of the pilchi and reeds. Next year the land receives better tillage and is

cleared, the crop being a mixture of massar with wheat or barley; CHAP.II.A. and in the third or fourth your wheat alone is grown, the soil hav- Agriculture ing become quite clean. The Ribi in these new moist lands is often preceded by a Kharif of rice, mish, maize, &c. As a whole crops. the agriculture of the Bet is much inferior to that of the Dhaia. There are no light soils like the rausli of the uplands, and the land requires much greater labour, and is naturally foul with weeds. Besides this the Muhammadan proprietors, except the Arains and Awans, are generally rather poor cultivators. The fields immediately round the site, or at the wells where there is irrigation, are kept clear enough; but in the outlying ones the crop will generally be found choked with weeds, the result of insufficient ploughing and failure to attempt keeping them down.

The usual complaints are occasionally heard about exhaustion of the soil. of the soil; but they are not pressed upon one, and there is little foundation for them. When it is said that the land does not yield so much as it did 200 or 300 years ago in the time of Akbar or before it there is no reason for dissenting from the proposition. It was then only being brought under cultivation; and there was no necessity for cropping any of it regularly. Thus three out of the four kinds of land enumerated in the Ain-i-Akbari (Gladwin's Translation, Volume I, Part III) are fallow; and revenue was only paid for land when cultivated. The waste prohably exceeded the cultivated area, and a new piece could always be brought under the plough when a fallow was required. The rates of yield given in the Ain are certainly high; but they are for the whole of India, and are not greater than would result if fallows were given to the land now. Thus the yield of wheat is set down at 9 to 18 maunds

a bigul (one standard), and those shown in Maunda the margin are not after all very heavy, Gram ... 7} ,, 13 ... 9] ,, d} taking both irrigated and unirrigated. It was in the nature of things that when cultivation had fully developed, a lower standard of productive power should be reached where mainire was not used; but there is nothing to show that within recent times, such as we have information concerning, this standard has decreased. The well lands, we know, will yield according to the amount of manure put on them; and the system of cultivating the unirrigated is in most parts of the District sound, and not likely to cause deterioration.

From what is said in the Section on Tonnes (Chapter III), about vation of a the constitution of villages, it will be evident that nothing resembling holding. a farm according to European ideas exists, as it does in other parts golden, waller, S. R., of the Province where the land of a cultivator lies in a lump, gener- § 111. ally round a well. The village is made up of a number of holdings owned by separate members of the community; and each owner has in his holding a share in every class of land situated in all parts of the village or sub-division. The operations have in the proceding pages been described soparately, but every proprietor has to

OHAP.II.A. distribute his time and labour over the various orops, which are of Agriculture every description, growing in his lands. Thus in the Samaila upland a proprietary holding consists of about 6 acros of land, of which 3½ ration of a (roughly) will be unirrigated and 2½ irrigated. Of the former again holding. half will be under fodder for the cattle and half under the common food grains; while of the irrigated land less than one acre will be under cane and cotton, and the rest under maize and wheat.

Coitivation in the Bét: manured. Gordon Waller, S. R. § 106,

In the eastern portion of the Bet there is no irrigation, but the soil is naturally moist, and the cultivation of manured land is of the same nature as that of irrigated land in the Dhaia, cane, cotton and wheat being the crops. The niái area generally lies round the site, but not as a matter of course, for there are no wells to make it necessary that the superior crops should be raised in a fixed area, and we accordingly find that it is very often shifted. In fact two crops of sugarcano can be grown in any land that gets sufficient manure, though it is generally convenient to have these crops near to the village. Except for the waterings, the description of the irrigated cultivation of the Dhaia will apply to the manured lands of the Bet. In the western half of the Bet there is a great deal of irrigation, and the superior cultivation is all at the wells. Maize followed by wheat is grown as in the uplands, and there is also some very fine market garden cultivation, especially under the city of Ludhiana, from which an ample supply of manure is drawn.

Manore. Gordon Walker, S. R. § 110.

In the description of the use of manure as practised in the District, which was furnished for the Fanine Report of 1879 (page 251), it was stated that 58 per cent. of the irrigated land was constantly, and 47 per cent. occasionally manured; while of the unirrigated cultivation only one per cent. of the irrigated area received occasional manure; that some 38 per cent. of the irrigated area grew double crops; and that the quantity of manure used per acre was 100 maunds in the land occasionally, and double that weight in land constantly manured.

The fields just round the site receive natural supply of manure by being made the receptacle of the village filth. The litter of the cattle is collected by the cultivators, each having his own heap, in hedged enclosures outside the site. The greater part of the droppings have been carefully removed for fuel, and the refuse consists of byre sweepings. By the commencement of the antumn rains these heaps have attained some dimensions, and the rains assist the decomposition of the mass, which is carted or carried in baskots to the fields intended for maize, spread over them and ploughed in. A top dressing is afterwards given when the maize has sprung up. For the Rabi following a little manure is also ploughed in; but the effect of that used for the maize lasts for the Rabi, as it is not really ready when put on, and some more is spread over the surface when the wheat is two or three inches out of the ground. The winter

collections of mannie (November to March) all go for the sugar- CHAP.II.A. cane; and they are generally in very fair condition, having been Agriculture rotting for four or five months, and exposed to the rain. Top dressings are also added till the cane is about three feet high. This description will apply to irrigated and to dofasli Bet lands alike. Unirrigated lands in the Dhiia never get manure, as they are much too dry to stand it. In those parts of the Dhaia which are irrigated by the canal manure is much used, and also in the western Jagraon and Jangal villages which have a magnificent supply. The manure is rather inferior according to our ideas as the most valuable part has been taken out; but it has a great effect on the soil, and is much valued. It would be impossible to raise cane or two crops in the nidi land without it. The refuse of the town of Ludhiana is very fine mannre. It is bought up by the Bet villages just below, in which there is some first rate market gardoning done in what is really noor soil.

Manure.

Ont of the total population of the District 370,329, or 55 per cent are directly dependent upon agriculture, and of them 63 mag and in per cent. are actual workers, the remainder boing dependents. About 22,000, or only 6 per cent. do not cultivate themselves but let their land on rent. The rest are almost all actual cultivators, cultivating owners numbering 274,526, occupancy tenants 3,886, tenants-at-will 25,211 and partners in cultivation (sáhnji) 38,415.

Only 4,200 persons are returned as agricultural labourers in the District, and of these only 1,543 are farm servonts (kámás paid monthly or half-yearly) and 2,657 field labourers paid daily wages. These figures are undoubtedly much below the mark,

The subject of the employment of field labour other than that of the proprietors or tenants themselves, is thus noticed in answers furnished by the District Officer and inserted in the Famine Report of 1879 (page 714):-

"The field labourers are nover exactly hired. They are paid by a share of the produce, usually one-fourth, and they are employed by the season. They are generally of the monial classes—sweepers. chamars, weavers, blacksmiths, carpenters, &c. Whon they cannot get field-work, they exorcise their handicrafts. In the isolated instances in which men are hired by the month, they are paid Rs. 8 per month. Their condition is distinctly inferior to that of the self-cultivating poorer agriculturists. They usually get an advance from the camindars which is deducted in grain at the harvests. They get petty loans from the village banias, but us they have not the scenrity of the land to offer, the bania's do not trust them with much."

A liliá káma is a farm labourer kept by a proprietor, generally because the latter cannot for some reason work his plough himself. The bilia kama gets Re. 1 to Re. 1-8 a month, and his food and clothes from the proprietor, but has no interest in the produce.

Gardon Walker, 8, R., CHAP.II,A. Table 19 of Part B gives the area under the principal crops by Agriculture Tahsil.

Princi p a 1 staples. Gordon B. R. § 95.

Sugarcane, maize, cotton and wheat are in the uplands only Table 19 of raised in land artificially irrigated, the unirrigated entries for these crops being for the Bet. The distribution of the various crops over the District is as follows: Sugarcane is grown in the first twelve or fifteen miles of the Bet, and in the uplands of Samrila Tahsil, and of Ludhiána, except in the Jangal villages and in the country about Pakhowál; but the proportion is higher in Samrála, and gradually decreases as we go westwards. There is also very little of it in the sandy tract along the high bank, but the lauds newly irrigated by the canal now grow sugarcane where formerly only the coarsest grains were sown. Cotton is generally grown where cane is, and also further west. The other crops are grown everywhere, except that in the uplands maize and wheat require urigation. The autumn unirrigated crops, pulses and fodder, are the same throughout the District; but in the Jangal villages bajra sometimes takes the place of jourar because it is more hardy. So too wheat mixed with gram is the unirrigated Rabi crop in the eastern parts where the rainfall is heavier. But the canal has put the arid tracts of Jagraon on a level with the best soil in the District.

Sugarcane, Gordon Walker, S. R. § 112.

The importance of sugarcane is much greater than is indicated by the area it covers, for the value of the yield is about ten times that of an ordinary unirrigated crop, and the total annual value some Rs. 12,00,000. It is almost entirely grown for the manufacture of some saccharine product (called kátha cano); but in a few villages the ponda or eating variety is raised. Kátha cane is grown in the irrigated lands of the Samrála Bet (where it occupies 12 per cent. of the whole area), and of a few Ludhiána villages; and at the wells in the uplands of Samrála and the eastern portion of Ludhiana, the best crop being perhaps that raised about Malandh. It is of three sorts: chan, a soft, juicy cane which grows to a considerable height, has a red colour and long joints (pori); dhaulu does not grow so high, has small joints, and is of a green colour and less juicy; while ghorru is an inferior sort, with many joints and a great deal of leaf at the top, very hard, and yielding much less juice than the others. The first of these is the real cane, and the other two are mere degenerations; no one ever keeps a ghorru stalk for seed; and dhaulu is only planted if there is not enough of chan. The cultivation in the Dhaia and Bet is much of the same description. Cane is sometimes the only crop in a field for two years, especially in outlying ones, where the supply of manure is limited. It may also be grown with the aid of a great deal of manure in land just cleared of another crop of cane, or of a Rabi crop of wheat; but, as a rule, it occupies the land for three harvests following a Kharif of cotton. Cane is not grown in the fields next to the site, but generally at a little distance. It is always planted, if possible, in land that has been cropped with cotton; and in the Upper Dhaia Circle of

Samurala we find that the area under the two crops is nearly the CHAPLI, A. samo. The rotation is generally-

Agriculture

Sogarcane.

First year Ploughing in the Rabi ... Cotlon in the Kharff, ... Ploughing in the Rabi Podder, &c, in the Rabi... ••• ... l'odder, &c, in the Rabi... ... Ploughing io the Kharff, ... Ploughing and cano sown in the Rabi ... Como in the Kharff, Second year Third year

and back again to cotton, giving a cane, a cotton and a foddor crop with perhaps a little grain in three years. The cane field is selected next to the well, as the crop has to be kept alive during the hottest months and always gets more frequent waterings than any other. The land is ploughed not less than 7 or 8 and up to 20 times, the more ploughings the better. All the available manure has first been spread over the field, and is ploughed in. The planting is done from the middle of Phagan to the middle of Chet (March). The seed consists of joints (port) cut from last your's crop, which have been kept covered up in pits in the field. In planting them one man goes along with a plough and another follows, laying down the joints at intervals of 6 or 8 inches in the furrow. The plough in making a now furrow covers up the former one; and the whole field is finally rolled. The canes spring from the eyes (unkh) of the joint. About 4 or 5 caues will come of one joint. Then follow waterings at intervals of 7 or 8 days in the uplands, and hoeings after each of the first few waterings. The fields are very carefully protected by stout hedges. In the Bet there are no waterings, and seldom any hocings: and the fields are quito open. The cane in the uplands grows to a height of 8 or 10 feet, and when it becomes heavy, is protected by several stalks being tied togother. In the Bét the height is only 5 or 6 feet, and this precaution is not necessary. There is altogether a great difference in the modes of cultivation, Dháin and Bét, due principally to the difference of natural conditions, and partly to the different limbits of the cultivators, those of the Dhain being industrious Jats, and of the Bet apathetic Mnhammadans, of the Raiput and Gujar tribes principally. The method of extracting the inice is much the same in both tracts. Cutting goes on all day in the field, each cane being stripped, and the flag at the top with the small joints immediately below it being removed. In the evening the seed joints are separated from the flag (which is then used for fodder or for feeding the boiler furnace) and tied up in bundles for seed. The cano is carted to the belie or mill, which stands just outside the village site. The processes of manufacture employed in the Bet and in the Dhaia or uplands are Walter, S. R. quite distinct, and an account of the latter will be given first. \$4.5, \$4.5. When the season for pressing approaches (November to March) the belna or mill and other appliances are put in order. The mill used throughout the District is of the sort described in "Punjab Products." The day before the cultivator's vari or turn at the mill, the cano is ent and stripped in the field, and the parts reserved for seed set aside. The cano is then carted to the mill in the evening, and next day it is pressed and the juice extracted. Two men sit at opposite sides of the rollers passing through the cane, which is tied

CHAP. II.A. up in bundles of 40 or 50 canes each. The juice runs into chattis Agriculture or jars of earthenware placed beneath the rollers to receive it. As the jars are filled the juice is taken into the boiling-house, and the boiling commences. At one end of the boiling-house there are two pans of iron, about 4 feet in diameter, placed over a fluc heated by a furnace fed from the outside of the building, the fuel being the refuse stalks, heads, &c. The pan nearest the wall is lower than the other, and is fixed, and into this the juice is poured. The second pan is higher and movable. When the juice has been boiled and evaporated in the lower pan for half an hour, it is lifted with a ladle into the upper pan, which is cooler: and there boils more slowly till it is ready, generally in about an hour. The pan is then lifted off, and the jnice stirred till it is cool, when it is poured into a flat dish of carthenware, where it lies to the thickness of about one or two inches. It is, when cool, scraped up with a wooden scraper and is either granular, in which case it is called shakar, or viscous (qur). If yar, it is made up into balls of about 4 seers weight. Shakar is put into earthenware jars. It depends entirely on the quality of the juice whether the produce takes the form of shakar or of gur: and this depends again on the soil and the character of the season. In the above process no chemical appliances are used; but in places lime and water are poured into the boiling juice to clean it, the scum being removed. This is generally done where shakar is produced, and has the result, it is said, of giving it a light colour, which is a recommendation. The total number of men employed on pressing and boiling is generally 7: two to drive the bullocks, two to feed the mill, and one to hand the cane to the feeders, one in the boiling house, one to feed the furnaco outside. The last is a Chamár or menial; but the other 6 are all of the cultivating class. The Hindu Jats of the Dhaia not only make but sell at their own price and when they choose their gur and shakar.

Ibid: §6-8.

The state of things in the Bét, where the population is all Muhammadan, is very different. The process of manufacture there is of two parts: the juice is extracted and boiled at the belna in much the same manner as in the Dhaia; but takes the more liquid form of rdb. Only one pan is placed on the furnaco; and, when two jars are filled with juice they are emptied into this through a straining oloth, and the juice boiled. Water boiled with sakhlaie bark is added for the purpose of purifying the juice, and the scum is removed as it rises. The boiling takes about 21 hours. When the boiling is completed the juice, now in a semi-liquid state and called rab, is taken out in a ladle, and put into an open vessel of earthenware till it cools, when it is poured into high jars (matti), the mouths of which are then closed with mud. These jars hold about 31 to 4 maunds (pucka weight) of rab. The boiler, called rabi, is always a man of the shop-keeping class, boiling being something of an art. The other men at work are, as in the uplands, cultiva-

tors or village menials. But the cultivator has really nothing CHAP.II.A. to do beyond extracting the juice. The second part of the process Agriculture of manufacture is completely in the hands of the shop-keeper class, the head-quarters of it being in the town of Machhiwara, which lies just over the Samrala Bet. The rab is taken off in the jars to the shop of the purchaser, in the back room of which, in one of the corners, a space (khánchi) four or five feet square is walled off to the height of about four or five feet. At the bottom of this, about a foot from the ground, a rough strainer is made of sticks fixed in the walls and running across at intervals, on the top of which are placed reeds and on the top of these a coarse cloth. The sides of the khánchi are lined with chitái, or matting made of river grass. When 20 or 30 jars have been collected the rab is poured into the khanchi and left for twenty or thirty days, during which the sirah or more liquid part drains off into a receptacle. The rab is then covered with a weed that grows in the water, called jala, put on to the depth of two or three inches (see name at p. 308 of "Punjab Products" This is changed every three or four days for about a fortnight. The effect of this covering and the straining is to clarify the mass; and, as the upper part assumes a light yellowish colour, it is taken off, and the remainder covered up again. The produce thus taken out is put in the sun and trampled. It is then called khánd. Another and a superior form of produce is bura, which is thus made. The sirah is strained off as for khánd, and the khánd is mixed with onefourth part water and boiled for evaporation in a pan for half an hour. It is then taken off and stirred till cool, when it takes the form of bura. The sirah or let (molasses) is boiled and kept in jars till the rains, when it is treated like rab, being put into a khanchi: or, if it is not good enough for this, it is used in its liquid form for sweetmeats, &c. Detailed information regarding the prices and the course of trade will be found in Appendix XIII to Mr Gordon Walker's Settlement Report from which the above is taken. Iron presses are now becoming popular. They can be worked by two men and two bullooks a piece and in 24 hours can press the average crop of one bigah. These presses can be hired for Rs. 8 to Rs. 25. The gur prepared by these iron presses is inferior; it is blacker and more liquid than that produced by a wooden press. It is, however, very much less expensive to make.

Sugarcane is the crop invariably converted into oash, and may be said to be the revenue-paying one. It is very valuable, otherwise it could never have held its own so long, for it occupies the land the better part of two years; and in the Dhaia the labour of cultivation is incessant. Bullocks stand the work at the wells and in the belnas for only a few years; and the cultivators are never tired of complaining of their hard life. These objections make it a dangerous crop to any but the most thrifty classes. The Jats keep out of debt because it is in them to do so; but the Muhammadan of the Bet will tell one that he is a victim of the sugarcane crop, and

Sagarcane.

CHAP.II.A. he is right to some extent, for he has not the qualities which would Agriculture enable him to subsist while his crop is growing.

Sugarcane.

Ponda sugarcane is now raised in a good many villages under Ludhiána. It was formerly confined to two or three Aráin villages; but the cultivation has spread. This crop requires a great deal of manure and constant attention; and pigs and jackals are very ford of it. But the canos have a ready sale in the Ludhiána bázár, and the erop is worth at least from Rs. 100 to 150 an acre; and is often bought for that amount as it stands by the green-greers.

Cotton. Gordon Walker, S. R. § 113,

Cotton is sown during the months Chét-Húr (April-June) in fields which have had a Kharif or a Rabi harvest. The best crops are raised in land which has enjoyed a fallow in the Rabi (sánwe). The yield is botter because of the fallow, and also because the sowings are early. It is not usual to have cotton immediately after a Rabi, and where this is done in Har the yield is poor. The crop generally fellows cane, as explained in the last paragraph. The number of ploughings required is not so great as in the cass of cane, and 3 to 4 are sufficient. In the Dhaia it is grown in the unirrigated lands of a few Samrála villages; but mostly in the well lands, and in dofasli or niti fields of the Bet. Where grown at the wells, irrigation is nocessary before sowing, unless there have been stray showers of rain in April-June, as there very often are. Two or three hoeings are given. After the autumn rains the waterings are very rare. Pickings commonce in October, and go on to the end of November, being eight to ten in number, at intervals of a week. The pickings are done by the women (at all events among the Jats); and the cotton and seed are separated by means of a gin or belna. Of the seed (rarewan) part is kept for sowing, and the rest given to the cattle. It is a favourite food for the well cattle in the cold weather, and for milch kine at all times. Til is often grown with the cotton. It is also very usual to run a plough through the field while the plants are standing and sow barley, carrots, metha, &c., generally for fodder; but there is very often a decent crop of barley caught in this way. A' cotton field may have in this way three or four crops in it at one time. There are no varieties of cotton. The usual short stapled sort of the Punjab plains with bushes 3 or 4 feet in height is grown everywhere. Two factories for cotton-ginning and one for cotton-pressing have been opened in Khanna since 1900, and an increase in the area under cotton may therefore be expected.

Maize. Gordon Walker, S. R. § 114.

Maize is sown at the end of July (from the beginning to the middle of Sawan) after 3 or 4 ploughings with a great deal of manure. The best orops are raised in the fields next to the site. It receives the usual number of hoeings (3 or 4), and springs up very fast, reaching a height of 7 or 8 feet and growing as well in Bét, irrigated and unirrigated, as in Dháia land, provided that it gets sufficient manure. The crop ripons in 60 to 70 days, and is

reaped at the end of October and beginning of November. There are CHAP.II.A. generally two to four cobs on a stalk. Maize is the best crop of all Agriculture for the cultivator. It does not require much labour in preparation, and few waterings are necessary if the rains are good. The yield is very great, the value of the crop being next to that of cane, while it has the advantage of a very speedy return. The zamindár lives on maize for some months, and it is a good, wholesome food. The stalks are also very fair fodder, and last for some time. The ordinary maize of the Dhaia has cobs about 7 or 8 inches in length, with a fair-sized seed of a yellow colour. A species known as batalan is grown in the Bet. It has a shorter cob and a smaller grain, but it is said to ripen in 24 months to 3 of the ordinary maize, and for this reason the seed is used by the Dhaia people when there has been a break in the rains and sowings are late.

Wheat is grown in the unirrigated lands of the Bét and the canal lands and a few unirrigated parts of the Dhaia; and at the Walker, S. R. wells everywhere. It is sown during October and November, as § 116. the cultivator has time for it; the unirrigated crops being taken first, so that the moisture be not lost. The unirrigated lands, where not manured, have received a number of ploughings in the cold weather, or rather ought to have, for the ordinary Muhammadan cultivator of the Bet seldom does his duty to the soil. In the manured lands of the Bét and the irrigated Dháia the crop follows maize, in which case the preparation consists of 2 or 3 ploughings; or, if the land has had a fallow, there have been winter ploughings as in the ordinary unirrigated lands. When the crop has sprung it receives in nidi lauds of the Dhain a top dressing of all the manure then available, and several waterings and hoeings. The waterings are at intervals of 15 days at least. The crop is reaped towards the end of April or the beginning of May. grain is eaten or sold, and the straw used as fodder for bullocks.

The wheat grown everywhere is the bearded red variety common to the Province, and is called kanak or ghean or lal-kanak. The wheat. grain of the Bet is said to be better than that of the Dha'a (to a native's taste), as the flour is said to be more sticky when moistened and pleasanter in flavour. It appears to be a mo e moist wheat, like the English. The varieties to which special names are given are uncommon, and only grown in irrigated land. They are: -mundi, a beardless red wheat with a slightly higher stalk and a larger grain than the common kind. The yield is said to be better; but the straw is hard and not good for fodder. The flour is much the same. Dudh-kháni or dudhi is a white wheat, also beardless, much the same in appearance as the last. The flour is very white, and much used by halvais for making sweetments. The straw is said to be hard and poor fodder. Phaman or bad lanak is a very tall variety, growing to a height of 4 or 5 feet in good well land. The grain is large, but said to be hard and not good for flour, and the straw is refused-by the cattle. The yield is superior to that of any

CHAP.II.A. other sort. It does not appear what foundation there is for the Agriculture preference for the common wheat, or how much it is due to prejud co; but the use of these varieties is not spreading.

Barley.

The cultivation of barley does not differ from that of wheat. There are no recognized varieties, except a sort called Kábuli jáu, which is grown in places, and has a whiter grain than ordinary barley. Barley is much hardier than wheat, is sown later and ripens earlier, being in the ground about 5 months to 6 of wheat. Wheat cannot be sown later than November, but barley will germinate, and give some yield even when sown as late as the end of December. When the moisture in the soil has dried, and there has been no fall of rain in October and November, the zamindár will go on in hopo of showers as late even as Christmas; and if there is rain at this time he will sow late barley (called Kanauri), and get a very poor crop, which gives a yield, perhaps not one-quarter of a good one, but still something to keep him alive. Sowings are occasionally as late as January 10th; and if the subsequent rains are heavy the yield of grain may be a very decent one, though the stalks are never more than 1 to 11 feet high.

Gram. Gordon Waller, B. R. § 117.

Gram is not usually sown by itself. It appears to require a good deal of moisture to make it germinate, though the plant is hardy enough afterwards; and it is only in a year of heavy rainfall that a large area is sown with it alone. The people say that the crop depends entirely on the rain of Sawan, i.e., the earliest monsoon rains, and that if these are scanty, however good the subsequent falls may be, the crop will come to nothing. The sowings commence from mid September and go on for two weeks only, as it is useless to sow it after the first week of October. It is reaped, first of all the spring crops, early in April. Gram is not grown in the Bét, the soil not being suitable.

Mixed gram and wheat or barley.

The great unirrigated crop of the Dhaia is a mixture of gram with either wheat or barley, sometimes with both, and called berra in all cases. It is sown in October, not later than the end of that month, in land that has had a year's fallow, and been prepared during the winter by ploughings. The seed is drilled in, and every eighth or tenth drill is sown with sarson or rape. The sarson ripens first, and is cut at the end of March, the rest being ready about April 10th. The reason for sowing two crops together is clearly that both of them are not likely to fail in the same season. The sarson is something over and above the regular crop of the field; and, if a success, gives a handsome return. In some years the wheat or barley is the better crop, and in some the gram; but it must be a very bad year in which both, as well as the sarson, The berra is cut and threshed as one crop; and no attempt is made to reap the grains separately. The mixed grain is sold, and people seem to prefer the meal made of it, because it is cheaper than pure wheat, and still has some in it; but it is easy to separate the

wheat and gram by means of a channo or iron sieve, which allows CHAP.II.A. the wheat grains to pass through, and not the gram. is very rarely used as yet. Sarson, besides being grown in the berra Mixed gram fields, is also sometimes cultivated in irrigated patches as a single and wheat or crop. Tárámira (Brassica eruca) rarely takes its place. The sarson barley. is either made into oil in the village presses, or brought to market and sold in seed. Almost every field of herra yields sarson too; but in our crop returns and produce estimates the land is only shown as under the former, as it is impossible to estimate the areas and yields separately.

But this Agriculture

The Kharif pulses are very numerous, the principal ones sown Kharif in the Dhaia being moth (Phaseolus acontifolius), mung (P. Mungo), millets, másh (P. Rozburgii) with inferior varieties called mungli, máhri, &c. Gordon Walker, S. B. These are sown sometimes in July in land that has had a Rabi crop. Walker and reaped by the end of October. Light sandy soils are well suited to them, and a mixture of one or two of the varieties is the general crop. The yield of grain is seldom very good; but the straw is very strengthening fodder. Except in the lighter soils, which will not bear it, the Kharif crop of the uplands is a mixture of the millets and these pulses. The great millet is either sown wide, when the object is to develop the heads for grain (jowar) or thick with a view to the fodder (charri). The times of sowing and reaping are the same as for the pulses. Where, as in the eastern portion of District, there is a great deal of well irrigation, and the well cattle are dependent on the fodder raised in the unirrigated land, the crop is always the mixture of moth, &c., with charm except where the soil is sandy, and only a pulse can be grown. The crop grows up very dense, the millet having a very small head, and never reaching more than a height of about 4 feet. The people begin cutting the whole as green fodder in August, and go on using it for two months till the crop has ripened. The heads of the charri are occasionally picked for the grain; but generally the mixed crop is cut down and given without any attempt to get the grain of the pulses. It is intended that the cattle should get the grain as well as the straw; for it would be a short-sighted policy to keep out the former, as the cultivator well knows. In Jagraon Tahsil there is not the same necessity for a strengthening fodder; and very fine jowár is grown. There is the same mixture of pulses; but the millet seed is in very small amount and the stalks come up at intervals and grow to a height often of 8 or 10 feet, and have very fine heads, which almost weigh them down. The pulses also have a fair yield of grain; and only the straw and jowár stalks are used for fodder. In the Jangal villages the spiked millet (bájra) sometimes takes the place of jovár. In the Bet charri or fodder alone is grown, the soil not suiting the pulses of the Dhaia. There is no yield of grain. Másh (called máh) takes the place in the Bet of moth, &c., but it is grown only in the new and moister lands adjoining the river. Ming is also grown

Massar (lentils) have been already mentioned as being sown

CHAP.II.A. alone or mixed with mash; but charri is the sole Kharif crop in the Agriculture bands of the Pukka Bét.

in newly recovered Bet land for the first 2 or 3 years. The crop Walker, S. R., is cut for fodder, or the grain is eaten as dal. It is only in the first year that it is grown by itself, the seed being usually mixed with barley. Barley and massar is the corresponding crop in the Bet to berra in the Dhaia. An occasional field of (alsi) linseed will be found in the Bét. Rice (munji, dhán) is grown in places along the river in completely new land. It is a very coarse sort, and the market price is about 30 seers a rupee. The whole area under it is only 2,500 acres. When a new piece of land turns up, it is ploughed roughly a couple of times, the grass (dib) often being left standing, and the rice sown. There is perhaps no crop at all; but generally a fair yield. There is no transplanting, and the crop ripens in forty days from sowing.

These are the principal crops, and the remaining ones may be

Miscellane. ous crops. Hemp. Walker, S. R. § 120.

disposed of briefly. San (crotalaria juncea) is grown in un-Gordon irrigated lands in sufficient amount to make the necessary ropes for agricultural purposes. It is ready in October, and is cut and steeped in the village ponds, the process causing a most offensive odour. It is then taken out, dried in the sun, the fibres pulled apart and worked by the hand into thin ropes, which are again steeped and then beaten (skutched). These thin ropes are then twisted into others of the necessary thickness. Sankukra (hibiscus cannabinus) is grown round the edges of cane fields sometimes. Indigo is grown in a few Muhammadan villages, principally in the Bet. The green crop is steeped, and the dye made into balls after the usual native method. Poppies are grown in a few villages for ? post and a catch crop of kangni or china is occasionally taken at the wells in a bad year when the price of grain is high. Tobacco is grown at the wells in fields which have borne a Kharif crop. It is sown in plots at the beginning of April, is transplanted in a week or ten days, and is cut in May. It requires a great deal of manure and constant watering. The Muhammadan cultivators of the Bét (Aráin, Gújar, &c.) grow a great deal; but there is also some in the Dhaia. Melons, musk (kharbúza), or water (tarbúza), are grown in the Bét, in unirrigated land. The crop is sown in April, and the melons come into the market in May, and go on through June. There is of course a very large demand for them in the town of Ludhiana; and the green-grocers (sabzi-farosh) buy them from the cultivator by the field, when it is known what the crop is likely to be. The price realized is sometimes very high, and is generally Rs. 20 to Rs. 30 an acre. The expense of the monre is considerable; but the crop is a paying one to the cultivator. There is a second crop of water-melons in the Kharif, sown in July and picked in October-November. Garlic (lassan) and onions (piáz) are also grown after the Rabi. In the Dháia

Indigo.

the cultivator grows a few square yards of the latter for his own CHAPLIA. consumption; but in the Bet large fields are grown and sold to Agriculture the green-grocers. Lassan fetches a high price, and is bought like melons by the field. Pepper (mirch) is also grown in Ardin and one crops. Gujar villages. All sorts of native vegetables are grown in the wells in the Bet. They are sonf (forniculum rulgace), dhaniá (coriander), potatoes, arbi (edible arum), sulgam (turnips), múli (radishes), ajuain, khira kakri (encumbers).

The cotton at the wells is usually followed by a green fodder crop of metho (feungreek), senji (trefoil) grown alone or mixed with barley or by a crop of carrots, which are largely caten hy the people themselves and also given to eattle.

Seed is ordinarily put at the following rate per bigah (kachcha):-gram 6 sers; wheat 10; maize 4; moth and mung 1: seed. mash 11; rice 10; and cotton 8 and sugarcane 10 maunds. These rates prevail throughout the District except in the dagnion and Ludhiána. Tahsils where the rate for wheat in unirrigated lands is 15 sees and in well-irrigated 20 sees.

Some of the minor calamities of season, and of the pests from Minor lamities which the crops suffer, are noted below:

Minor ca-

Agast or agat is a north wind which blows for a day or two about Bluidon, 22nd (middle of September), and breaks tho maize stalks, besides injuring in a less degree the cane and cotton. The name is that of a demon who is supposed to cross the country on his way from the hills to Ceylon, and to spread ruin amongst the crops in his course, which is generally only a few miles wide. His advent is followed by the appearance of the bird called mamola (wagtail); and is really the beginning of the cold weather. Witness the couplet:-

"Bhidon I by your 22nd day Agat sets out for Lanka; tho streams and water become controlled; the butter hardons."

Frost does a good deal of harm (pala márliá is the expression used) to the cane and to the late cotton (sometimes), as well as to the sarson in the Rabi. It does not appear to affect the wheat and grain; but the wheat and barley, when the grains are forming in the heads, are very liable to be blighted by cold winds from the north or west, the east winds are always mild. This is called tulla marlia and the people have no very clear account to give of what happens. They say that they find some morning that the grain is blighted, and the heads turn yellow and wither. Hull-storms (gold. galla) occur almost annually somowhore or other in the District, oither in the mouth of October or in March. The Kharff or part of it is generally reaped at the time that the autumn storms come; but considerable injury is sometimes done to the pulses. The Rabi always suffers severely from hail whom it falls, the wheat and barloy stalks being snapped, and the gram pods broken off. In a few

Frost.

Blight,

Mail.

CHAP.II.A days the crop gets a yellow withered appearance. A hail-storm Agriculture generally passes across some part of the District to a width of one or two miles, but the total injury done is never very considerable,

locusts.

Lightning. only a few fields in any village being affected as a rule. Lightning does occasional injury to fields of cotton, pulses and san in the autumn. Locusts (ahu, tid) appear at places every third or fourth year, and go across some of the villages in a line two or three miles wide, eating up everything. Their appearance is generally in September-October (Bhádon-Assoj). Their ravages have never

been so extensive as to cause a general calamity; and the injury is Catespillars, usually partial, like that of hail-storms. Nundi are green caterpillars which attack the gram and sarson stalks. Good rains in the cold weather will kill them, but if the rains are short they are most destructive to unirrigated crops; much worse than locusts, because they are universal and come every year. They live in holes, and come out during the night to work. Hard soils suffer most. And

Kungi,

in places at least half of the gram crop is sometimes eaten by them. Kungi, or red rust, is said by the natives to be caused by a tiny insect that appears on the wheat or barley heads when rain is followed by clouds. It affects the crops in Magh-Chet when the ears are beginning to form, and covers them with a fine dust, yellow or red, under which the grain shrivels. General injury is done by kungi at rare intervals, the last bad year for it baving been 1875. It often appears, but a few days of sunshine drive it away. Kungi affects irrigated as well as unirrigated crops. Young. cane plants are attacked by a caterpillar called kansua and full grown cane by small meets called tela (black) and punke (white).

Whiteants.

Tela also attacks cotton. Cane and cotton are cleared of these by rain, otherwise the juice of the cane becomes watery and poor. Whiteants (seonk) attack the roots of the unirrigated Rabi crops in all soils, and do a great deal of injury in some years. The oure for them, as for all other pests, is rain.

Bats.

Field rats also do some harm in light soil, but have never come to be much of a pest. Sundi caterpillars and whiteants do much more injury than anything else to the unirrigated crops. Jackals eat the maize all over the District, and the destruction caused by pigs in the villages under Ludhiána has been noticed in Chapter I (page 18). Herds of deer wander all over the fields, but they are not so numerous as to cause much injury. People put up in

Jackals, pigs, dear.

> places sticks with cloth attached to scare the deer off (called darne). Scarecrows, Platforms (manna) are erected on the trees or on sticks stuck in the grounds for the purpose of watching the maize and jower fields and boys sit on these screaming and firing mud pellets from slings (gopia). A rude fiddle made of half a gourd, with a piece of gut

men.

stretched across it, is used in the Bét for frightening the pigs from the cane. The noise may be heard at a great distance. The cultivators also light fires along their fields for the same purpose, and have to watch all night. In most villages a rakhi or watchman

is appointed, whose duty it is to wander about the fields and see CHAP. II.A. that cattle do not stray amongst the crops. If cattle are caught Agriculture trespassing, the owner is fined a couple of sers of grain, which is paid to the watcher, who also receives an allowance from the scarcerows, whole village at harvest time. Watching at night is not usual, men. -except where, in places, the habit of pilfering from the fields has become common, or in the neighbourhood of Harni villages, or of the towns.

The principal weeds are piaci, kasumbhi and lehi. The two first are so named from their resemblance to the onion and the safflower, and the last is the common thistle. All three flourish throughout the District; but the Bét appears to suit them best. Pidzi does the most harm and a great part of the cultivator's time is taken up in rooting it out of his fields. This process is not attended with much success in the Bét or in Muhammadan villages, and one often sees a field of wheat completely killed down by it. It appears to be impossible to clear the land of it altogether, for there is a fresh growth every year; and, if left alone, it would very soon cover the fields. Other less common weeds are, hithu chauri saroch, jaunchi, harmal, barru.

Novious

It will be seen from Table 18 of Part B. that in the 20 years 1882-1902 the cultivated area increased by over 30,000 acros. In area. 1901-02 it amounted to over four-fifths of the total area of the District. Surveyou area, The total area "available for cultivation not yet cultivated" is over 52,000 acres, and there is little prospect of this being to any great extent reduced. Canal irrigation, as will be seen below, has reached its limit in this District. The proportion borne by the Rabi and Kharif harvests to the total area cropped is shown in Table 19; there is an increasing tendency for the Rabi to predominate, owing to the facilities afforded by canal irrigation and the good prices obtainable for wheat.

Cultivated Table 18 o

Mr. Gordon Walker thus discussed the past and future of agriculture in Ludhiána:-

lmprove ments in agriculture and stupics.

"The agriculture which I have described in the preceding paragraphs is of much the same character as it has been for the last century or two. With the increase of population the land has come to be more heavily manured and cropped, but the manner of tilling it has remained unchanged. No new staples have been introduced within recorded memory. The agriculture is, I think, perfectly sound, and it would not be easy to show a Jat how he could do better with the capital at his disposal. A better sugarcane mill may take the place of the present clumsy machine, and improvements may be effected in the form of the plough; but I do not see that much is to be done in the way of introducing new staples or mannres. There are some points in which the people might be instructed; but there are not many in the present system which could be pointed out as really faulty. A Jat would willingly adopt any real improvement within his means, as he is not prejudiced. For the ordinary cultivator of the Bet one has only to set up his neighbour, the Aráin or the Hindu Jat of the Dháia, as an example of what he might do."

CHAP.II.A.

Foreign seeds of maixe, cotton, jouar and carrots were recently Agriculture tried but with no success, probably because the zamindars did not pay full attention to them.

Talávi. Table 20 of Part B.

Louns under the Agriculturists' Loans Act are not popular, and there is but little demand for loans under Land Improvements Loans Act. The delays and formalities connected with takávi, and the rigid system of repayments which takes no account of bad harvests account for its unpopularity. The total amounts advanced under

	Land im- provement Leans.	Loans to Agricul- tunists,				
Advances Written off as irrocoverable Outstandings	R _{9.} 8,170 "9,675	Rs. 31,223 • 65 4,877				

the Land Improvement. and Agriculturists' Loans Acts during the 10 years ending September 1901 are shown in the margin, together with the sums written off as irrecoverable during the same period,

and the amounts outstanding on 30th September 1901.

Economic condition of

The economical position of the landholders of the District the agricul was discussed at some length at pages 422 #. of the Famine Report of 1879, where actual figures are given for instances selected as and mort- typical. In forwarding these figures, the Settlement Officer wrote as follows :-

> "The District has a river frontage on the Sutlej of about 60 miles, and stretches to the south of it some 20 or 30. The alluvial tract between the river and high land is more extensive than in most Districts, reaching inland 5 or 6 miles. It is inhabited by Muhammadans of the Rajput and Gujar tribes, who form about a sixth of the agricultural population of the whole Dutrict. The upland tract is almost entirely in the hands of Jats, principally Hindas, who form about two-thirds of the whole agricultural population of the District. The difference is the condition of the inhabitants of these two tracts is so very marked that it will be better to give a separate account of each.

> "The Bet or alluvial tract has a most fortile soil, requiring very little exertion from man for its cultivation. If the overflow from the river fail, the Kharif harvest may be bad; but it is not probable that there will be a failure of rain the same year, and a good Rubi crop makes up the deficiency. The water is so near the surface that it can be raised with little exortion in any amount for irrigation. What the people dread is excess of flood from the river rather than drought. Notwithstanding these advantages, the Rajputs and Gujars who own and cultivate the land are in a very bad condition. Naturally indolent and thriftless, they are the worst cultivators and the most reckless spenders of any money that comes into their hands. They have no idea of regulating their expenditure by their means and are consequently in the power of the money-lenders, who are too willing to make advances on the security of the land. I believe that all the owners in this tract are in dobt, and most of them deeply. They have no property except the jewolry of their women and a few cattle. Their houses are squalid; they have none but carthenware dishes, seldom any store of grain; and they are generally dependent for their daily food on their money-lenders, whose torms preclude the chance of any part of the produce remaining in their

hands. The only cause of their indebtedness, I may add, is their CKAP.II.A. thriftlessness. Special allowance was made for their habits in fixing the Government assessment, which is comparatively light.

"These remarks apply to the owners of the land. The condition of the tenants is for several reasons much superior. Rent is generally the agriculpaid in kind, so that the distinction between tenants-at-will and occupancy tarists. Sales tenants is not marked. Of late years, owing to the influx of grain princi- and mortpally, there has been a great demand for labour in and about the town gages of laad. of Ludbiána; and men bave been drawn away largely from cultivation. A tenant can earn three to eight annas a day by manual labour, and thus add largely to his means of subsistence. The Rajput proprietors, who are themselves much above working as coolies, are really at the mercy of their tenants. I have heard of many cases in which a tenant with occupancy rights, holding of a Rajput proprictor, cultivates a small portion only of his land; the proprietor receiving as his share of the produce what is worth actually less than the Government assessment of the holding.

"I can give no reliable figures as to the amount of indebtedness of the various classes at this stage of the Sottlement. All of the proprietors in the Bet are probably in debt, most of them deeply, and vory few of the tenants.

"Turning to the Dhaia or upland tract of the District, we see a very different picture. The country stretches to the south, a clear and fertile plain unbroken by a single stream. The soil is light and capable of yielding the richest staples. In the eastern part of the District the water is near the surface, and a large proportion of the land is rrigated; while towards the west the soil becomes lighter and more mixed with sand, and irrigation rarer. But the people (Jats) are much the same everywhere. They make the best use of the land that their knowledge admits of, and are most frugal in their mode of life, eating whatever grain is in season, and spending little moncy in extravagance. The people are almost entirely cultivating owners. The tenants that there are consist principally of (1) owners cultivating the land of other owners; (2) village menials.

"In the small populous portion of the District adjoining Ambala the land is mostly irrigated, and the conditions are a little different. But in the greater portion, roughly sneaking all to the south and west of the railway, the proportion of land irrigated is small. The soil though light and sandy is most fertile; and in a good year the supply of grain from a holding is much more than soflicient for the support of the household. The surplus is either stored or sold, and the proceeds haid away or lent. If there is a scanty rainfall, the people are not at a loss. What generally happens is this. There is no fodder for the cattle (is there is no land left for grazing in the whole District), and the cows and buffaloos are sold for almost nothing, or die. The men of the family leave the other members to subsist as they can on the store of grain or money hoarded, and go to seek work elsewhere. Few zamindárs' honsos in the District are without a cart; and the men, yoking their bollocks, not now required for agriculture, into this, go off to Lahore, Peshawar and Delhi, coaveying goods for hire. In a few months they return with earnings sufficient to live over the bad harvest.

"The seasons have been partionlarly good recently, and the high price of grain has brought a good deal of money into the agriculturists' hands. Some of them speak of being in debt; but there are very few indeed who owe more than a couple of good harvests will pay off. The debts they rofer to are temporary, and the creditor is generally a brother proprietor.

LUDHIANA DISTRICT.

the agriculand mortgages of land.

CHAP.II.A. In vary few villages is there a professional money-lender. The houses Agriculture tostify by their ontward appearance to the prosperity of the people. Brass dishes are always to be found in thom, and there is cenerally a store of grain and some money hearded. The women all wear silver jewelry. Most houses have two or three cows or buffalo cows, and something is made by turists. Salos selling the young stock or the ghi.

"The custom in this tract is for a tenant, invariably in the case of occupancy tenants, and usually in the case of tenants-at-will, to pay a consolidated rout, that is, the Government demand and something over. This system does not appear to work so well for the tenants, who are not generally men of sufficient means to bear the burden of a bad year; and debt is not uncommon amongst them.

"In conclusion, I should say that the condition of the agricultural population was most flourishing, except in the lands along the river. The owners in that tract are mostly indebted, many whole villages being mortgaged Among the Jet owners the amount of debt is very small. I regret that I can live no figures at present as to the amount of indebtedness. Occupancy tenants hold less than 5 per cent, of the whole cultivation. They are well off in the low-lands, and not so prosperous in the higher lands. On the whole I should not say that they were generally in debt. Tenunts-at-will hold about 20 per cent, of the cultivated land; but a large prepertion of these have alse land of their own, or are village corvants, having other means of eking out a livelihood. Tenants depending entirely for support on their holdings do not form a great part of the agricultural community. This class is, as a rule, free from debt."

Gordon Walker, S. R. § 194.

In a series of Appendices (No. Va.-c) to the new Settlement Report was collected such information as could be obtained relating to the transfers of land during the last 30 years. The general rosult may be stated for the whole District that two per cent. of the area has been sold in the last 30 years, and that at present eight per cont. is held in mortgage with possession, these proportions being fairly equal everywhere except that in Jagraon the area mortgaged is 12 per cent. Mortgagos without possession are very uncommon. One agriculturist will not advance money to another unless he gots land into his possession sufficient to give a fair return; while the money-lending classes give credit on running accounts, or, if the borrower's credit is not good, on land transferred to them.

"The registration returns showed that the number of transfers previous to 1865 was very small; but that it has not varied very much during the three periods of five years, 1866-80. The general question of what the causes are which have led to the transfers sinco 1865 is a very wide one. Thoy cannot be a sign eithor of want of prosperity or of undac pressure of the land-revenue, for the agricultural population has never been so well off as daring these fifteen years, and the profits of cultivation have nover been so great. There can be no doubt that, on the contrary, they indicate prosperity, and may be due to extravagance resulting from a sudden influx of wealth. It is remarkable that the propertion of area in morigage should be higher in Jagraon thun in the other Talsils, although we know that the condition of the Jats here is superior to that of the agricultural population of any other part. It should also be added that mortgages are very often not due to any real pressure of debt; but merely a method of raising money temporarily required; and sometimes, too, they are a were form of tenure.

Alienation Act.

PART A.

In the next place it is important to see into whose hands the trans- CHAP.II.A.

			_
Co-parceoers.	Other agricul- turists.	Non-agricul- tu ists,	Totul,
42	23	35	100
43	14	43	100
	42	42 23	42 23 35

ferred land has come. In Agriculture the margin is an abstruct of Appendices Va. and b. of the Settlement Report. The inference from this is that the agriculturists could hold their own against the class whose profession is money-lending far better than in most Districts of the Pro-

Gordon. Walker, S. R.

vince: The Jats of the uplands at all events seldom allowed an oatsider to acquire permanently any land in a village community. The right of pro-emption was generally claimed and insisted on. Every well-to-do Jat who has saved a little money will endeavour to invest it in a mortgago of land, and some of the tribe have established very large money-lending connections. Amongst the Muhammadans of all tribes, too, there are a good number of men who hold land in mortgage. It would never bo difficult for a cultivator in the uplands to raise a loan on his land from a co-sharer; and this could generally be done also in most parts of the lowlands. But there is often a prejudice against borrowing money except from a regular money-lender. There are some very large bankers of the regular money-lending classes in Ladhiána, Jagráon, Raikot and Máchhiward, who carry on a large business with the villagers, and also some scattered over the District; but the mass of the Jat population can get on without any assistance, and have generally some cash is band. The total outstanding debt on mortgage is returned as upwards of Rs. 20,00,000 or about two years of the revenue demand. Of the money owed on book debt we have no details."

Speaking generally we may say that the land is passing from the hands of the inferior cultivators to those of the Hindu Jats. This land, applies, however, principally to the Dhaia lands, as those in the Bét are inferior and not considered by the Jats as worth acquiring. Before the passing of the Land Alienation Act (XII of 1900) the general tendency was for the Dhaia lands to pass to the Hindu Jats while the Bet lands went to the sahukins. Since the passing of the Act transfers have been comparatively few. For some time the zamindárs understood that the Government had prohibited the transfer of land altogether, and so lately as September 1903 the Deputy Commissioner reported that the attitude of the people was one of interested curiosity. There are no Co-operative Credit Societies in the District, and little prospect of their being instituted. The Jat always invests his money in land, and the Muhammadan in the Bet has no money to invest.

A special difficulty in connection with the definition of the Land Alienaterm agriculturist has been experienced in this District by tion Act. sub-registrars. The patwaris' copies of the Record of the Regular Sottlement (1851) were destroyed by order of the Director of Land Records in 1895. Hence applicants for registration have to produce certified copies from the District Record Room to prove their status as agriculturists to the sub-registrar. In some cases sub-registrars

Land Alienation Act.

CHAP.II.A. referred to the Collector to find out whether the aliences fulfilled Agriculture the definition of agriculturists. This procedure was troublesome. expensive, and dilatory, and threw oxtra work on Revenue and Registration officials. To meet this difficulty lists have been prepared for each villago showing the persons (not being members of agricultural tribes) who were entered as owners or occupancy tenants in the Regular Settlements. Copies of these lists are now distributed to patuaris and the agriculturist alience takes a certificate from the paticari to the effect that his name or that of his ancestor occurs on the list. The general effect of the Act, as stated by the Deputy Commissioner in his report for the year 1902-03, has been good. The Milwa Jat has always been in the habit of investing his spare cash in land, and now that the competition of the sahikars has disappeared the extranoors factor which used to rule the price of land, the fact that the seller was in the power of the buyer and his inferior in cunning, has disappeared likewise. Honce land has regained its natural value, the Jat buys it or takes it on mortgage from his compatriot for what it is worth to him as an invostment, and the result has been a general appreciation in the value of land. The Deputy Commissioner considers that the educated Sikh community is the class which is likely to benefit most from the passing of the Act. The Jat loves litigation and for choice employs a pleader of his own class. The pleader—and the impetus lately given to Sikh education will increase the class—reaps rich fees and invests them in land. There can be little doubt that the Hindu Jat will in course of time expropriate his Muhammadan fellow-tribesman from the rich lands of the Dhain, and leave him only the inferior and degenerating land of the Bét. From the point of view of extensive cultivation this cannot be considered otherwise than as a gain to the community at largo.

Cattle breed.

From what has been written in Chapter I as to the absonce of grazing ground, it may be inferred that the District is not adapted for eattle-breeding.

Draught and plough cattle, Agricultural

§ 180,

Bullocks are universally used for agricultural work; and he must be a very poor man who can only afford a buffalo, this animal being considered the sign of poverty in a cultivator. The bullocks Table 22 of are either bred in the villages, or imported from the cattle-breeding tracts to the south (Hansi, &c.), being brought up in droves by Walker, S. R. dealers who go from village to village, generally a fow weeks before the Baisákhi and Díwáli fairs, on their way to Amritsar. It is difficult to determine exactly what proportion of the eattle used in agriculture are bred in the District; but it is probable that between three-fourths and half of those in Samrila are imported. In Jagraon there is still some grazing land left, and the greater part of the cattle in use are probably bred in the Tahsil; but there are also large purchases from dealers. The people of the Jangal are very fond of buying cattle, using them for the few months during which agricultural operations go on, and then selling them, thus

saving the keep for several months. The home-bred cattle are CHAP.II,A said to be better for the work than those imported, because, ap- Agriculture parently, the former are stall-fed all their lives, while the latter, having been raised on grazing, feel the change, and cannot do well plough cattle, on the straw which they have to cat for a great part of the year. A bullock costs from Rs. 20 to 25, if two years old; and Rs. 40 stock to 60, if of full working age. At two years' old he is yoked in the plough; and works in this till he is four, when he is put to the well. Bullocks go on working till 12; but at that age they are old, and they do not live beyond 14 or 15. In Samvila and the highly cultivated parts of Ludhiana they do not last so long, on account of the constant hard work in the sugarcane mills and at the wells. Where (as in Jagraon) the people keep carts, the quality of the draught cattle is superior, and one sees some very fine bullocks in those parts, much higher prices being paid, and the animals being better looked after. In the Bet the eattle are of a very much inferior stamp, as they are only required for the plough. They cost Rs. 15 to 20 each, and are bought anywhere. The price of plough cattle does not appear to have risen since Sottlement.

In the months of Baisakh, Jet, Har (April-June) the cattle are fed on dry straw and grain, the new straw of the Rabi coming in draw by the first of these months. This is the worst time for them, and the working cattle could not get on without the see or two of grain water, S. R. that they get daily. In Sawan and Bhadon there is good grass in the waste, if any is left, and in the fields intended for the next Rabi, where it is allowed to grow till the time of the Sawan ploughing. The cattle are grazed on this, and it is also grubbed up and given to them in the stall, the grain being stopped. Cutting grass is the work, in Jat villages, of the women, who are out all day in the fields, collecting bundles. The cattle have very light work in these two months, because the wells are not working; and between this and the new grass they put on condition. In Asanj and lialf of Kátak (September to October) green fodder, either charri alone or mixed with moth, &c., is given; and this is porhaps the best time of the whole year for the cattle. At the end of Katak the charri, &c., is cut and stored, and during Magar, Poh, Magh, and Phagan the dry stalks of charci, maize, &c., are given, and, if necessary, straw. The straw is either white (safed bhúsa), that of barley and wheat, or missa, i.e., of moth, mash, &c., coloured straw. The latter, especially the math straw, is said to be very strengthening. In the month of Chet (March) patelies of green fodder are grown at the wells, either metha, suji, &c., or carrots; and green wheat or barley is also given, but not commonly in an ordinary year. Speaking generally chaff, grass, charri, jou ir, seuji, and the erashed stalks of sugarcano and bajra are the principal fodders, supplemented in times of searcity by leases of trees. Rice-linsks are supposed to lessen the yield of milk and are not given to milch-cattle, unless no other folder is available. Chast is imported by rail to supplement the local supplyCHAP. II, A.

\$ 132,

The number of mileh-cattle is not more than sufficient to Agriculture supply local wants. There is no attempt to keep eows specially for the sale of milk or of ghi except in few Gujar villages mostly close under Ludhiana; and in these the milk is generally bought up Walker, S. R. by people from the town. Our enumeration would show a cew to every five or six of the population. In the Bet buffaloes and cows are generally kept; and in the Dhaia cows. The milk is boiled and churned in the usual manner in a chátti of earthcoware by means of a wooden staff (madhám) twirled round in the hands or by a string. The people of the house use the butter-milk (lassi) which forms a very important part of the cultivator's daily food; but the ght is generally sold or kept for the occasion of a marriage, &c. The whole supply is not, however, more than sufficient for the consumption of the better classes in the villages and in the towns. Cows cost about Rs. 20 each in Samrila or Ludhiana Tahsils, but in Jagraon Rs. 35 is paid for a better stamp of animal. The buffalces cost Rs. 50 in the two former Tahsils and Rs. 75 in Jagraon.

A good deal of loss is caused annually by cattle-disease, and

Loss of cattle Insuffici e n t food : Drought, Gordon

attempts are being made to disseminate information on the subject. The names given by the people are so various, and their accounts of the causes often so fanciful, that it is not easy to identify the different diseases that prevail. Great mortality occurs from overwork and insufficient food, especially in a year of drought. In the eastern parts of the District nearly the whole of the Kharif unirrigated crop is grown for fodder; and a failure of the autumu rains means that the eattle will get no grass or green charri in the autumn, and no dry charri in the months of the cold weather; while they are at the same time deprived of their usual rest of two or three months, and have constant work at the wells. It is not possible that cattle should go all the year round on dry straw and grain. The first effect of drought is to reduce the condition of the cattle, and to render them very liable to the ordinary ailments if they do not actually die of overwork and starvation. There was a considerable loss in this way in 1861 and 1868, but not in any other year since the Regular Settlemont. Besides being sadly overworked and often insufficiently fed, the cattle in the eastern villages are vory badly housed. They are taken home inside the village, and ponned up in houses a few feet square, while their masters are enjoying the fresh air on the roof of the house. In the western parts they have much better accommodation, and get plenty of fresh air.

Diseases prevalent.

Sirak and barra are terms used to denote any form of epidemie disease; also marri. Only two true epidemic diseases amongst cattle can be identified, of which the first appears to be either anthrax fever or malignant sorethroat. It is called gal gotu, and is very deadly in its effects, and also most infectious, attacking buffaloes and bullocks alike. The affected beast gives up its food, and a swelling forms in the throat. This appears to burst internally, and the majority of animals affected die the day after the appearance of the first symptoms. No attempt is made at a cure; but it CHAP.II.A. is said that, if purging sets in the second day, the animal will recover, Agriculture unless it dies of exhaustion in ten or fifteen days. The disease is always present somewhere in the District, and when a village becomes valent. infected, it will lose fifty to a hundred cattle in a few days. Recoveries are rare. No attempt is ever made to prevent the spread of the disease by isolation, burying carcases, &c. It is said to be carried from one village to another by carrion-eating birds, storks in particular.

Foot and mouth disease is called monkhur or morkhur (also rora Foot and and chápla), and is common. It is never very deadly; but the mouth discattle affected are useless for a long time. It appears to be very infectious and crops up here and there almost every year. first object to which attention should be directed is obviously the prevention of the spread of these epidemics from village to village and inside of villages; and it will, of course, be very difficult to induce the people to do anything for themselves in the matter.

Of the ordinary ailments, ogn appears to be epilepsy, or Ordinary ailparalysis, the beast affected generally falling down and dying in a monte of short time. Tilla and hallu are the effect of cold, and attack buffaloes only, the symptom being difficulty of respiration. Mokh is purging in any disease. Rinderpest does not appear to be amongst the diseases which attack the cattle of the District. Cattle are often lost by overfeeding with methe or other green fodder after having had poor food for some months. When there is a break in the rains, and the charri is stanted (called sokha), cattle getting into the field and grazing fall down and die. This is called patha lag gaya, and is apparently choking.

A portion of this District, as well as of Ferozepore and Hissár (Sirsa Tahsil) abuts on a tract of country extending about Walter, S. R., 50 miles all round the Patiala fort of Bhatinda, which is called the 131. Jangal, and the horse of which tract is well known as the Jangal horse, the breed being descended from Arab stallions kept at Bhatinda by the Muhammadan Emperors. Patiala still keeps stallions there but of inferior quality. The mares of the Jagraon Tabsil, which abuts on this tract, are of a very fine breed. The people of the Dhaia are not fond of keeping horses, considering them a useless expense. The distances are generally short, and the people prefer walking. Of the lambardars even it is only one in a hundred who owns any sort of an animal, or has ever been on one. The Settlement enumeration showed about three horses or ponies to each village. In the Bct, where there is a little grazing, the Muhammadans have a few weedy ponies, but these are of a very poor breed. In one or two of the villages to the south-west of Ludhiána the proprietors are engaged in the horse trade (Burj Latan, Alike, Dhingar, &c.). They buy young animals all over the country, feed them up for two years, and sell them at Batesar and other fairs across the Jumna. This trade is not of any importance.

Horses.

CHAP-II.A. Faire.

A horse and cattle fair known as the Chait Chaudas Fair is Agriculture held at Ludhiana on the 14th to the 18th of Chait (about the end of March). It is of no great importance. Cattle to the value of about Rs. 50,000 or 60,000 change hands. Prizes amounting to nearly Rs. 1,000 are generally given from District Funds. The fair is attended by people from the adjacent Districts, the Phulkian States and Maler Kotla on their way to the Amritsar fair. For the three years prior to 1901 owing to plague and scarcity no fair was held and plague also prevented its being held in 1902. In 1908 the average prices realized in rupces were: ponics, 46: marcs, 57: cows, 15: bullocks, 22: she-buffalocs, 23: male-buffalocs, 5: mules, 112: camels, 47: and goats, 5. Rs. 912 were realized in fees.

Camels. Gordon § 185.

Camels are kept by the people of most of the Jangal villages, Waller, S. R. and by those of a good many others scattered over the District where it has become the custom to do so. It is very common for an enterprising zamindár to purchase two or three camels with any savings that he has, and to start in the carrying trade. The Jats are very fond of turning an honest ponny in this way; and where carts will not work, as in the Jangal villages, camels are used for bringing up the grain to market. The Kabul campaign of 1878 is said to have nearly cleared the District of camels.

Sheep and goats, and miscellaneous Walker, S. R., § 136.

Sheep and goats are returned as 120 to 130 thousand in number. They are kept in every village, the goats for their milk and the sheep for their wool. They belong to no special class of the community, and require no separate mention here. Sheep are cheapest in Sannala Tabsil where the price is about Rs. 2 per head as against Rs. 5 in Jagraon. Goats cost Rs. 5 each in Samrala as against Rs. 8 in Jagraon. Donkeys and mules are used by Kumhars or brick-makers. A donkey costs about Rs. 15 in any part of the District. There are very few pigs. Fowls are not to be found, except in Muhammadan villages, and there they belong to low caste people generally Chúhrás. There are ducks and geese in many villages along tho Budha, and a large number are reared in the old chauni or former military bázár. These find their way to Kasanli and Simla, and there is rather a busy trade in them.

Veterinary Dapartment.

The Veterinary Hospital and Dispensary at Ludhiána was opened in 1896. The District Board have at 072 present (1904) a scheme for building a snitable ... 1,472 house for the Hospital, and its increasing popularity with the people is shown by the figures in the margin which give the number of cases treated for the last three years. In 1902-03, 960 cases out of 1,472 were discharged cured, while partial relief was given to 428. Of the 1,472 cases 591 were horses and 489 cattle. A Veterinary Assistant on a salary of Rs. 100 a month is paid by the District Board.

There are three stallions belonging to the District Board, one at each Tahsil. There are two donkey-stallions also belonging to

the District Board, under the charge of two lumbardars. Seven CHAPLIA. donkey-stallions, maintained from Provincial Funds, are kept in the Agriculture various Tabsils. There are a few branded mares in the Ludhina and Jagriou Talisils, but horse breeding is not very vigorously Department, carried on in the District.

Under the Punjah Military Transport Act (I of 1903) this Transport on the Option of the Commentation District has been placed in the Delhi Division. 2,176 The census figures showed the number of animals 156,531

Camels Unlicels ... 337 Mul. c in the District given in the margin. The Dis-... 5,416 trict has been divided into 63 sab-eircles by zails or groups of zails, and municipalities or wards of municipalities.

Camela 25 Corps (one carps = 1,119) Hallecks 1 Train (1,050)

Uples 45 Penles Gi

Of these 19 are in Samuala Tabsil, 16 in Jagraion, and 28 in Landhisma, excluding the town. Tho Provisional allotment of the quota which the District may be called upon to furnish is shown in the margin.

Indication.

The District rainfall has been discussed above (p. 12), Although when compared with Ferozepore Ludhiúna appears an oasis, it is too far from the Siwiliks to be classed as even submontane, and would fare badly from time to time if it were solely dependent on the rainfall to mature its crops. The conditions vary largely in different parts of the District. In the Bet the land is practically level with the water. In the Dhilia the water-level is often less than 10 feet below the surface. In the Jungal villages, however, water is not found at less than 150 or 200 feet below the surface; in other words it is virtually non-existent. The irrigated percentage of each crop is shown in the margin, for the years

Ilco			%	1900-01. Previous to 1883 well-irriga-
Engarcane	444	***	7.16	tion was common throughout the Dhiin,
l'otton	**	***	47 15	while in the Bet large tracts of sailab
Maica	***		357	
Wheat	***		:11.2	land brought a good if uncertain harvest
litzm	***		10.5	to the cultivator. The District as a whole
llating	***	***	22 5	
Mung	***	*4*	2.4	could not, however, he then considered
McO.	***	***	**	secure from famine as a failure of the

rains meant that the buryest was restricted to the few fields that surrounded each well. In 1883 the Sirhind Canal was opened.

Tin: Summe Canalan

The Ludhions and Juguion Tabsils are irrigated from the Aboliar Branch of the Canal, which is in charge of the Ladhiann Division, with its headquarters at Ludhiana. A small portion of the southern part of Tahsil Ladhiana is irrigated by the Blintinda Branch which is in charge of the Bhatimh Division with its headquarters at Bhatinda in Putiála territory.

⁽¹⁾ This account of the Subind Canel is taken from a note by the Executive Engineer, Ludhiana Division. Canal bridges and crossings are given under Communications below,

CHAP.II.A.

The Canal Main Line enters the District at its 17th mile near Agriculture Bahlolpur in the Samrila Tahsil and runs in a westerly direction Main Canal, until it reaches Manpur village in Patiala at its 30th mile. Here the main line ends and bifurcates into two large Branches, the one to the west irrigating British territory: while the other irrigates the Phulkian States. The Main Line has a bed width of 200 feet and can carry a maximum supply of 8,000 cubic feet per second. with a depth of 11.5 feet. The whole of the Main Line is navigable.

Branches.

At Manpur the Branch which flows west and irrigates British territory is called the Combined Branch. It has a bed width of 136 feet: and can carry a full supply of 5,000 cubic feet per second; the other Branch which irrigates the Phulkian States is called the Patifila Feeder and has a bed width of 75 feet and can carry 3,080 cubic feet per second. The former after a course of two miles bifurcates into the two British Branches called the Abohar and Bhatinda Branches.

The northern or Abohar Branch starts with a bed width of 88 feet and a full supply of 3,155 miles of which 39 miles are in Ludhiána and most of the remainder in the Ferozepore District. In the Ludhiana District this Branch is navigable throughout.

The southern or Bhatinda Branch starts with a bed width of 84 feet and a full supply 2,530 cubic feet per second, it has a length of 100 miles of which only the first 12 miles are in the Ludhiana District. From the 34th mile of the Main Line to the 2nd mile on the Abohar Branch and the 6th on the Bhatinda Branch the Canal is in the narrow strip of Patiala State territory which projects into the Ludhiána District. This Branch is not navigable.

The following statement gives details of the Canal Irrigation for the year 1901-02:-

Talisil.	Assessment Circle.	Number of villagos irrigated.	Tolpi area commanded.	Cropped area,	Abiána.
Ladhiána	Dhai Nícha Dhai Uncha Thára Pawádh Jangal	1 47 40 3 26	43 10,174 6,601 418 18,284	82 10,148 7,460 619 12,656	203 89,503 15,625 2,733 59,723
-	Total	117	855,520	30,965	1,11,687
Jagráon	Dhai Nicha Dhai Uncha	3 70	136 25,867	103 33,368	505 1,18,552
	Total	82	25,503	83,581	1,14,057
	District Total	109	61,023	64,496	2,25,744

Five minors from the Abohar Branch have been definitely CHAP.II.A. closed for Rabi irrigation since 1901-02, in order to pass on more Agriculture water to Perozepore. This has not caused any hardship, as the tracts affected were irrigated by wells before the advent of the Canal and the camindars have merely reverted to their disused wells.

Branches,

The Capal henclits 117 villages in Ludhiana Tuhsil and 82 in Jagraon. It commands 267,628 acres in the District of which it is estimated that it should irrigate 70,507 acres annually. In point of fact it irrigated an average of 78,466 acres per annum during the five years ending 1899-1900, but the closure of the five minors mentioned above brought the figures down to 61,023 acres in 1901-02.

The names of the most important main distributaries are Distribushown in the margin. There are taries, Lubiasa Dirinos, f- Ilianista llitisios. Kherpar Salea Haikel

Jair inal Josephan Pall unal Tair andi Deblen

altogether 4551 miles of distributaries in the Ludhiana District.

The assessments of the whole canal in British territory are Assessments. made entirely by the Canal officers. In the last three years the variations in the revenue assessed were comparatively small. No water advantage or owner's rate is at present charged on the Sirland Canal. As however lands now watered by the Canal were at Settlement assessed in this marrigated aspect (except such as were at the time watered by wells) Government is now considering the advisability of imposing an owner's rate.

The occupier's (or water) rate charged varies for flow irrigation from Rs. 7-8 an acre for a crop of sugarcane, rice and water-unts to 12 maps for a single watering before ploughing. Lift rates are calculated at firds of the flow-rates. The average occupier's rate per acre is almost constant at Rs. 8-8 per acre in the Klurff and Rahi.

The working expenses vary from a little under to very slightly over Re. I per acre of annual irrigation. Some villages in the langal Expenses. Tract are irrigated by the Jind and Nilha rajbahas, and pay some Rs. 9,300 to the Patiala Canal Division. It may be remarked in passing that though the Canal has on the whole proved an immense henefit to the District by adding very largely to its resources and rendering it secure from famine, yet it has not been an immixed blessing. The water-level has risen 8 or 9 feet owing to percolation from the Canal. One result of this is that wells which we constructed before the rise in the water-level are in danger of falling in, and in some cases have done so, as the part above the old water-level was constructed of brick and mad, instead of brick in lime. Percolation again is responsible for water-logging the soil in Samrála, where the strip

ORAP.II.A. of land between the Canal and the Budha Nala is frequently such a swamp that cultivation is impossible. Considerable remissions of revenue have been granted on this account in 19 villages of the Dháia Nícha Circle, the loss to Government being debited to the Canal Department. Attempts have been made to drain this tract

Dhaia Nicha Circle, the loss to Government being debited to the Canal Department. Attempts have been made to drain this tract so far without success. In the Bét lands there is now so little water in the river that the subsoil moisture has greatly decreased. This has of course affected the suilaba land. These disadvantages however are so far outweighed by the advantages which the Canal has brought to the District. A telegraph line extends from the Canal Head down the Main Line and down each of the British

Canal telegraphs.

brought to the District. A telegraph line extends from the Canal Head down the Main Line and down each of the British Branches. By its means speedy and efficient regulation of supplies in every Branch and distributary is rendered possible; and prompt measures can be taken to reduce damage to a minimum in case of an accident or breach to a channel.

Plantations. A line of well-grown shade trees now exists on each side of the Canal (Main Line and Branches). A fair amount of revenue from sales of timber, fuel and grass is derived from these plan-

Boundary There is a public road on either side of both the Abohar and Bhatinda Canal Branches.

Dams.

tations.

The District is not especially liable to floods. The only dam in the District crosses the village of Aligarh. It is $1\frac{1}{2}$ miles long and was constructed with the object of protecting the town of Jagraon from floods in the case of an overflow of storm-water. It was built about 1880 by joint contributions from District and Municipal Funds and is now annually repaired by the Municipality of Jagraon.

In the Bét the depth of the water below the surface is only 8

Table 24 of Part B. Wells in the Bet.

or 10 feet, and the lift very oasy. The wells here are of two sorts. There are kachcha or temporary wells with a lining made of pilchi, the water being raised in an earthou pot suspended from the end of a lever or pole, the other end of which is heavily weighted. The pot is pulled down into the well by a string attached to that end of the pole; and the weight at the other end raises it when full to the surface, where it is emptied into the irrigating channel. This apparatus is called a dhinkli, and has the advantage of only requiring one man to work it. There are also masonry wells of small diameter, worked like the other wells of the District with a bucket raised by bullocks. At the Regular Settlement there appear to have been very few masonry wells, and people wore content with the simpler dhinkli; but within the 25 years nearly 1,000 masonry wells have been sunk, mostly in the villages just below Ludhiána

city and to the west, for irrigation is not required in Bét lands further east. The dhinkli is capable of watering only about an acre of land; and, although the Aráin cultivator can grow a great deal in this small area, he can do much more with cattle and a

Gordon Walker, S. R. § 98. permanent well capable of watering 6 to 7 acres; and the change is CHAPILA. a decided advance. The Persian-wheel is used in one or two Agriculture villages in the Jagraion Bet, adjoining Ferozepore.

In the Dhain the wells are all of masonry, the water is raised wous in the by means of a rope and leather bucket (láo charsa), worked by two uplands. pairs of bullocks alternately going down an inclined plane or run. The rope works over a wheel or pulley, raised a little above the well on a forked stick. To one end of the rope is uttached the bucket, and the other is fixed to the voke of the ballocks, which are driven down the run. When the bucket rises to the top, it is rested on the edge of a reservoir and emptied into it by a man standing there for the purpose, when the rope is unfastened from the roke and the backet allowed to descend into the well. Three or four men and two pairs of bullocks are required for one bucket, and can work for three or four hours at a stretch. For the continnons working of a single luncket-well four pairs of bullocks and if or 8 men are necessary. With this complement it will go on for the whole day. Nearly half of the wells in the District have two buckets and two sots of gear completely separate, so that both are worked at the same time. These are much wider than the single lincket wells, being 11 or 12 feet in diameter (while the latter are generally 7 or 8), and cost more to construct. The usual cost is from Rs. 250 to Rs. 300 for a single, and from Rs. 400 to Rs. 500 for a double well. The compensation paid for wells destroyed by the Sirland Canal in 1869 averaged between Rs. 400 and Rs. 500. Irrigation is also given in places (Bft and Dhina) from village tanks, the water being raised 3 or 4 feet to the level of the fields by means of a basket worked by two men with ropes; but this is only possible at certain times of the year when the tanks are full. The water is first run into a small well or reservoir (called chula), and thouco raised by a basket (called dal) into the irrigation channel. The basket is lined with leather, and has two ropes attached to it, one ressing under each side and coming out at the corners. Two men stand on opposite sides of the well holding the two ends of each rope, and raise the water in the basket.

The distance of the water from the surface and the depth of Spring lord, the water in the wells was recorded at Settlement for every village depth of the in the District. The result of this record was to show that beyond wells. the influence of the river, which affects the water-level to some distance from the high bank the depth below the surface of the water in the wells diminished from north-east to south-west in Samrala and the continuous part of the Ludhiana Tabsil. The Sirhind Canal has, however, considerably raised the water-level throughout the Dhiin.

The depth of water in the wells varies a good deal according to locality and season. It is generally 12 or 15 foot, but in a dry water in the year will fall much lower. The amount of water which can be drawn out of a well depends on the source from which it is fed,

CHAP.II.A. The supply from beneath the lower clay is inexhaustible; but most Agriculture wolls are filled from the sand, and are liable to be worked dry, especially where the rainfall has been deficient.

The method of sinking a well is as follows:—An execution of constructing the size designed for the well is first made through the upper Gordon stratum of clay soil till the sand is reached, generally at a depth of Walker, S. R. 15 to 20 feet; and at the bottom of this is laid down the chak or cylindrical frame-work of wood on which the masonry lining of the woll is to be rested. This lixing is built up to the surface, and above it to a height of 8 or 10 feet and weighted down while the sand at the bottom is scooped out. The structure gradually sinks through the sand, the chalk keeping it firm. Three sorts of sand are met with in the excevation; first, fine dry sand (called reti), and then moist coarser sand (reta), and finally sand which comes out in lumps mixed with pieces of clay or kankar (called ghatti); and it is from this last that the water is generally drawn. The sinker says that a good foundation has been reached (pathun lug guya). The top of the well is then finished, and the reservoirs and other appliances built. In some villages the lower stratum of clay is reached (called pándu), and this gives a sure foundation for the well. A hole about a foot in diameter is driven through the olay into the sand below it by means of a pointed iron instrumont; and the water rises as in a spring. It is a great piece of luck to have a well founded on the pándu for it can never fall in, and the supply of water is unlimited. Such a well is genorally worked with three or four buckets. The pándu is said to be reached in most well-sinking villages about Malaudh and occasionally elsewhere. A well not founded on the pándu besides having a supply of water that is liable to be exhausted, may suddenly disappear altogother, or gradually subside, the foundation being undermined by the action of the bucket.

I r rigating

Wells are worked with one, two, three and even four buckets: poworofa and we cannot judge of the irrigating power by merely striking an average of the area for each well. It is usually calculated that a Walker, S. R. two-bucket well can irrigate half as much again as a single well; and at this rate we have the average area watered by one of the latter sort 12 acres, and by one of the former 18 (in the Dhaia). The following is an extract from the Assessment Report of Samrála:— "But to form an idea of the irrigating power of a well, we must examine the area under the various crops and the seasons during which they are irrigated. Roughly speaking, the Rabi erop is irrigated for six months (October to March), and the sugarcane crop for ten months (May to February). The other Kharif crops, cotton and maize, require irrigation for nearly four months (July to October). The number of waterings given varies with the character of the season; but generally the Rabi crop requires one every 20 days, and the cane once a week. Taking the Rabi erop thon, we have 28,000 acres watered once in three weeks, or 9,300 once a week,

and 6,200 of sngarcanc. This gives about five acres watered every CHAPILE. week by a one-backet well. In the Kharif the area is naturally a good deal less. The estimate given me by zamindars is one bigah (micka), or five-eighths acre a day for each lineket." The average area watered by a masonry well in the Bet is nearly seven acres, which bears about 12 acres of crop in the year.

Wages and Prices.

In the uplands the wells generally lie round the village site in a ring, the unirrigated lands heing outside this. In some of the in the Dalia, small villages of the Kheri iliqa (Samrila) practically the whole Walker, B. B. area is irrigated, and in most villages of this Tahsil upwards of 40 \$ 104. per cent, is regularly watered. As we go westwards the proportion gradually decreases to about 10 per cent, in Jagraon Tahsil, while the outlying villages to the south have no well-irrigation at all. The irrigated cultivation is lest studied in Samuala, where it is in greatest proportion, and here it varies in quality from that in the rich niai land adjoining the site on which is deposited all the natural filth of the village besides what it receives from the manuro heaps, to the land attached to distant wells, to which manure is with difficulty convoyed and grudgingly given. This mai circle comes so close to the site as just to leave room for a road. It may be said to be always under crop, and regularly bears two harvests in the year. In January or February, while the Rubi crops are growing, the fields selected for sugarcavoure manned, watered and then ploughed, till the soil is reduced to a fine tilth, eight or ten inches deep.

Table 18 of Part B. shows the number of wells and the land they irrigate by Tabsils, for the year 1901-02.

Section B.—Rents, Wages and Prices

There are only two or three large zamindari estates in the labour. District, and the cultivation is almost entirely by the proprietors themselves. The Settlement returns showed 21 per cent. of the Part IL cultivated area as in the hands of tenants, but the greater part of walter, s. R. this is held by mon who own other land. For the distribution of \$ 120. land between owners and tenants, see below (Chap. III).

When a proprietor has any spare had more than he can work, this is either let to a co-sharor who has not enough laml of his own to support himself, or an agricultural partnership is entered into.

Rents are fixed for the year about June 15th (Nimania), Zahlercrop but earlier and separately for cancand cotton. For the Kharff crops rents. (cane, cotton, maize, charri, moth, &c.) a cush rate on the crop is almost invariably fixed by agreement, and paid when the crop is ripe or nearly so, not beforehand. The reason is that if the crop is a bad one a liberal owner will semetimes reduce the rate fixed. The rent is calculated on the local measure, which is the kachcha bigah in the east, and the ghumdo or kanil in Jagraon and in most of the

Reats. Wages and Prices.

rents.

CHAP.II.B. Bet. The rent-rate is mentioned, and the amount to be paid is calculated on the known area of the field; or the ground is paced or measured with a rope. The cash rent only covers the harvest, except that sometimes a rate is fixed so as to include the wheat Zabli or orop

following the maize; but more generally a separate rent in kind is taken for the wheat. The land returns to the owner at once when the crop has been cut. Thus land is rented at the Nimánia for charri only; and the crop is taken. The proprietor must arrange . for the winter ploughings necessary for the crop of next year, and he disposes of the land at once with this view; but the agreement has really effect from the next Nimánia, seven or eight months after. and would be for the Rabi after that. In some villages where the land is all much of one quality and the cultivation not very good Bigan rates. (Muhammadan Rájpút villages mostly), the proprietors will rent their land at so much all round on the kachcha bigah. This saves trouble, to escape which is the great object in life of a Muhammadan landowner. A field is often rented for the cultivation of a single

holdinge.

crop like cane, charri, &c.; but where a number of fields are rented in one holding (lahna), the rent takes the form of this general rate per higoh, or zabti rates are agreed on for certain crops and kind rents for others, the tenant raising the crops that suit him best; or again a lump sum (chakota) is fixed to be paid by the tenant as rent of the holding for the whole year, he having hiberty to raise what crop he likes. A holding rented in any of these ways will consist of all sorts of land.

Rentsin kind.

Rents in kind are taken for the Rabi crops, rarely for cotton, and almost never for other Kharif crops, except in Jagraon Tahsil? The straw is divided as well as the grain, and the proprietor takes a somewhat smaller proportion of the former than of the latter. The usual rates are half to two-fifths for unirrigated lands with one-third of the straw; and for irrigated, one-third of grain and one-fourth straw. Batai, or subdivision of produce, is a very simple process in this District. The tenant cuts and threshes the grain; and on an appointed day the proprietor comes to the heap for his share. The grain is measured out in a large earthenware, jar called (chátti or map) which holds about a kachcha maund (17 seers pakka), and the straw in arm-fulls. The proprietor then removes his share. If a fagir or other holy man appears, he gets a small portion, of which no account is taken. It says much for the intelligence of the people how entirely they have broken away from the very elaborate system of batái which prevailed years ago when the revenue was taken partly in kind. There are none of the elaborate calculations of allowances to the various menials, &c., such as are kept up in less advanced parts of the Province; and there are also none of the superstitions observances attending the division of the produce. Perhaps the most important feature of all is the absence of the special weighman of the shop-keeping class. The allowance to menials are described under Wages below pp. 148-150.

The statistics of rent are contained in Appendices II A. and CHAP.II.E. B. of the Settlement Report; and from these it will be seen that the ages and Prices proportion of the total area of the land paying proper cash rents is only 5 per cent. of the cultivation, that is after deducting from Cash rents the areas shown in Appendix II A. land of which the rent is for various reasons merely nominal. These competition cash rents are wolker, S. R. shown in Appendix II B. The former rulers of the country took a \$205. large share of their revenue at rates on crops; and this revenue, which was a full rent really, has survived in the cash rates now paid for land taken for the cultivation of cane, maize, cotton and other orops. There are three methods of fixing cash rents. A portion of a proprietary holding may be let for the year at so much on the local standard of area without regard to the crops to be grown; or the area may be approximately known to both parties and a lump sum (called chakota or chakáwa) be agreed on without actual measurement. In the first case the area is subsequently paced out, and the rent of the whole calculated at the rate agreed on, a third party being called in to settle disputes if necessary. The third method is where a field or area is rented for the purpose of growing a certain crop, and a rent on the crop is charged at a certain rate on the local standard of measure, the area and rent being subsequently determined when the crop is standing. Between ordinary agriculturists, where the transactions are very small, one or other of these three forms of rent is adopted; but where there are large proprietors, such as the Kheri Sardárs in Samrala Tahsil, the old Sikh method of collecting revenue is still followed, and the tenant agrees to pay at crop rates on whatever he grows in the Kharif harvest.

The rates of rent prevailing throughout the District do not differ very much. Irrigated land will everywhere in the Dhaia pay from Rs. 2 to 3 on the kachcha bigah, i.e., from Rs. 9-8 to 14 an acre. The rent of unirrigated land of ordinary quality is from Re. 1 to 1-8 a kachcha bigah (Rs. 4-12 to 7 an acre); but the poorer soils run as low as 12 annas and 8 annas. The proportion of these poorer soils is small, and on the average unirrigated land does not pay less than Re. 1 a kachcha bigah, or nearly Rs. 5 an acre. In the Bet the first two kinds of cash rent are almost unknown.

The crops which ordinarily pay zabti or cash rents are cane, maize, cotton, in the irrigated uplands, and the first of these in the unirrigated lands of the Upper Bet; and in the unirrigated lands of the Dhaia the autumn pulses and millets, whether sown for fodder or with a view to grain also. The lowest rate paid for sugarcane land is Rs. 2-8 a kachcha bigah, and this is only in the Bet. The average in the Dhaia is about Rs. 3 or 3-8, while in a few large villages it runs as high as Rs. 5. The general rate is about Rs. 14 or 15 an acre. This rent is for the use of the land during one and a half years usually, as not more than one crop can be got into the two years besides the cane. The rates for maize and cotton are from Rs. 1-8 to 8 a kacholia bigah, and average about Rs, 10 an aore

Crop rates.

Rents, Wages and Prices.

CHAP.ILB. in the Dhaia, and something less in the Bet. For charri and the mixed fodder crops of the Kharif Rc. 1 a kachcha bigah is usually paid, unless the soil is poor, whon the rate is as low as 8 or 12 annas; but on the other hand it may go as high as Re. 1-8. The Crop rates, usual rent for runsli land is not much under Rs. 5 an acre. In the Bet lands below Ludhiana, where there is some very fine market gardening, land will rent as high as Rs. 20 to 30 an acre; but the above rates are those usually paid throughout the District.

Rates rent in kind,

The area returned as paying rents in kind is 10 per cent. of the whole cultivation. The rates prevailing are as follows:-In the Bet 1 of the grain is taken without a share of the straw; and sometimes 2 ths whore the land is irrigated; but even in the case of well lands the proprietor ordinarily realizes at the higher rate. A share of the straw is taken in a few villages. In the Dhúa the rate for irrigated lands is and of the grain with 4th of the straw; and for unirrigated lands \frac{1}{2} of the grain is taken as often as \frac{9}{2}ths, very seldon $\frac{1}{2}$ rd; while the proprietor's share of the straw varies from and to ath. In addition to his proper share of the produce, the proprietor takes also a portion under the name of kharch or 'expenses.' In places, too, the proprietor takes from the tenant a portion of the revenue demand as well as a share of the produce.

Retail Prices. Tables 26a & Wholesale

Prices at the Revised Settlement will be found fully discussed 266 of Part B. in the Scttlement Report, page 184.

Prices. Price of land. Gordon Walker, S. R. § 196,

Appendices Va and V of the Settlement Report (statistics taken from the patacáris' annual papers) give the average price per acre as Rs. 34, or 26 times the revenue demand, and the mortgage money secured per acre (with possession) as Rs. 32, or 28 times the revenue demand. The price which land will fetch varies a good deal over the District; and appears to be highest in Jagraion and the Jangal where the labour of cultivators is small, the revenue light, and the rate of rent in kind high. The great rise in the price of the inferior grains has also had probably something to do with this.

Wages of artizans, Price of Labour. Table 25 of Coolies.

A simple money wage is paid only in Ludhiana and the other towns. In Ludhiana masons and blacksmiths earn, if paid by the day, Rs. 10 to 12 a month; and carpenters a little more, Rs. 12 to 15. The rates are slightly lower in Jagraon, Raikot, &c. A common coolie is paid 2½ to 3 annas a day (Rs. 5 a month) everywhere There is usually a good deal of work for coolies in carrying grain from the sardis and grain markets to the station. This is ordinarily done in hand-carts worked by a few coolies together (revi) In the busy times of the trade 4 or 5 annas a day may be carned in this way, the payment being by weight. A number of men of the same class earn their living by grubbing grass in the neighbourhood and selling it in the city. These coolics are of all classes, agriculturists (Jats and Gújars) who have been driven to the work by the scarcity of the land, village menials, Kashmiris of the city. So. As there are only single looms and no factories, wages for

[PART A.

weaving are almost unknown. An apprentice gets his food and CHAP.II, B. Rs. I to 2 a mouth from his master. A weaver will earn not more than 2 to 3 annus a day, purchasing his own material, and solling Wages and the piece when ready.

Weavers.

In the vil-

In the villages carpenters and masons, if employed by the day, get their food and 4 or 5 annas. Lahourers at reaping time receive leget. a hundle of crop as their wages; but it is seldom that such men are employed. An account has already been given in Section A of this Chapter of the number in which the village servants are paid by the harvest. A coole doing any odd job, such as plastering a house, gets his food and I to I man for the day's work, Weavers are given the raw materials, and are paid by the piece.

Private servants (l'ima nij) receive Rs. 1 or 2 per menson with their daily food from the zamindars by whom they are employed. They help in agricultural, as well as in other works at all times, but get no share of the produce. Lahourers (ladi) only help the cultivator at harvest time, getting a sheaf every evening. The sheaf should weigh one manual pakka, and it will contain 2ths grain and 5ths chaff. Sometimes the cultivator will throw in a loaf and a cup of whey at lassimila, but each is not paid. often join their relatives in harvesting and then they get their midday meal and some food at lassirela, the relations belying them in turn with their own barvest.

The practice in vogue in the Dhiia Mcha is that out of 300 mannds khám of produce 5 maunds khám are given to the Lohúr (blacksmith) and 5 to the corpenter, while the rest, riz., the barber, Chihra, water-carrier and Chamar are given 20 sers khan each. The practice in the Bit is that the proprietor takes 4th of the whole for himself and from the remaining 7ths gives 8 chhataks each to the barber, blacksmith, carpenter and ritha who watches the field.

In Tabsil Ladhiána this payment is made per plough. There is no estimate of the area tilled by one plough as regarded as the measure. However the Earher, water-carrier and Chuhra get 15 ries than each and the carpenter and blacksmith 25 sees each. The potter only gets 10 sers kham. The Chamar or cohhler is given 3 sees khain per manud kheim of produce. His duty is to supply the entire family of the zamindar with shoes for the whole year. If he supplies shoes from a hide he will be given annua 2 per pair in addition to his dues. He will also have to supply two charsa (leather backets) in the year: for each charge he gets Re. 1 from the zamindir, and he will have to do repairs for nothing. In brief there are no fixed rates at which village menials are paid. It depends on the position of the cominder and the place and time when they are put to work.

In the following paragraphs will be found some account of the village artizans and menials (kamina), and the allowances made to village them. Under former rulers when the revenue was realized in kind

Kamins or

Wages and Prices.

menials.

CHAP.II.B. a small portion of the whole produce was first set apart for the kamins and for some servants of the chief, and the remainder was divided between the cultivator and the Sarkár in the proportion fixed. With a cash demand this custom disappeared, and the kamins Kamine or now receive their allowances from the cultivating proprietors in a lump at each harvest. There is none of the elaborate division of the produce such as is customary in other Districts; and, even when a tenant pays his rent in kind, no deduction is made from the common heap; but each party gives his kamins from his own house a fixed amount of produce and not a share of the whole. The tendency is for the cultivators to alter their agreements with the kamins, and to cut the allowances down. In fact these allowances are generally ceasing to be determined by custom. The calculations made by the Settlement Officer gave the result, that of the whole produce from 20 to 16 was given to the kamins, and the deduction that should be made on this account from the total produce was fixed at 72 per cent. It may be open to doubt whether any deduction at all was necessary, for a tenant paying in kind has to give to his kamins a portion of the share left him by the proprietor; but it was not considered advisable to depart here again from the usual procedure. In places proprietors have taken advantage of the old custom and realize a proportion (1 or 2 sers in the maund) of the total produce under the name of kharch over and above the share of the produce agreed on; but this, though nominally for servants and kamins, is really only an addition to the proprietor's share.

Chamárs, Gordon Walker, &. R. § 128.

The most numerous of the village menial class are the Chamárs, of whom some account has been given in Chap. I. (page 64). These people have to perform certain tasks, of which the principal is the repair of all leather appliances (well-buckets, seeddrills, &c.), and of the cultivators' shoes; and they have also to repair the village gates, to collect grass and keep watch when any officer of Government comes, to carry bundles to the next village on such occasions, &c., &c. They have also to remove all dead cattle, and they are entitled to the carcases and skins of these. The Chamars are paid full price for all new goods, shoes, buckets, &c.; and occasionally cultivate a piece of land, either alone or in partnership with a camindar. They generally receive as menials an allowance of grain per plough (about 30 sérs); also some cotton and gúr. These allowances are also, though rarely, made on the total yield (about one sér per maund). The Chamár families are generally divided amongst the sharers, say one to every ten houses of the latter.

Tarbhán.

The Tarkhan or carpenter in return for an allowance at harvest time has to execute all repairs, and also to make small things, like goads, yokes, &c., but for new ploughs, pitchforks and other implements of the sort he is paid in cash, the cultivator supplying the wood. He has a good deal of work about the wells, and a great deal at the presses (belna) in villages where sugarcane is growni

. The Lohar or blacksmith makes the ploughshare, the culti- CHAP.II.E. vator supplying the iron, and he also repairs all iron-work. Sometimes one man does the work of carpenter and blacksmith. The Tarkhán and Lohár receive allowances either on the plough or on. the total produce (from a quarter ser to one ser per maund).

Rents. Wages and , Prices, Lohár,

Where there are Chúhras they are only used for calling the people together or giving notice to any one who is wanted (bulári). The allowance is small, generally one-sixteenth to a quarter ser in the maund.

Chahra.

The Jhinwar or waterman has to supply baskots for the cane press, and gets a vory small allowance (about 16 to \$ ser per mound). He also supplies water at marriages, but is paid for this specially.

Thinker.

The Nat or barber performs personal services to the cultivator, cuts his nails, shaves him, &c., and receives much the same as the Jhinwar.

The plough (hal) on which these allowances are generally calculated is a variable measure; but, roughly speaking, where all the kamins receive a full allowance, they absorb 10 to 10 of the gross produce. This is according to the administration papers of the villages; but the practice is really different. When the revenue was taken in kind a heap was set apart for the village servants (2 to 21 sers in the maund); and this was divided amongst them secording to their recognised shares. But with our fixed assessment this system could not continue, except where a proprietor takes rent in kind from a tenant. There has been a tendency to break up the constitution of the village in regard to these menials, the action being mostly on the part of the proprietors, for the kamins are generally much too degraded to wish for any change, and are in the power of the proprietors completely, not having even the option of changing their abode when too hard prossed. The result has been that the proprietors attempt to cut down the allowances, and make new terms with the kamins. In many administration papers a condition has been recorded that the relation of the proprietors to the kamins is liable to annual revision, and in some villages there are no customary allowances or services at all; and, when a cultivator has any work to be done by one of the class, he pays for it in grain or cash. In many villages too the proprietor will not now allow the Chamár to have the skins, as the price of leather has rison very high in late years, and money is to be made out of them.

The tola or modi corresponds to the dharwai of the Manjha country. Under Sikh rule, and until very recently, he was the weighman. patmari in addition to his other numerous vocations. Besides his private business of shop-keeper, he managed the malba or village fund, and made out what were accepted as patweri's annual papers for Government.

It is impossible to form any satisfactory estimate of the

CHAP.II,B.

Rents, Wages and Prices

Poverty or wealth of the

people.

wealth of the commercial and industrial classes. The figures given in Table 42 of Part B show the working of the income tax for the last seven years. The numbers affected by the tax are very small. It may be said generally that a very large proportion of the artisans in the towns are extremely poor, while their fellows in the villages are scarcely less dependent upon the nature of the harvest than are the agriculturists themselves, their fees often taking the form of a fixed share of the produce; while even where this is not the case, the demand for their products necessarily varies with the prosperity

die in a year of draught. The following extract from Mr. Walker's report sketches the standard of living which prevails among the

of their customers. Perhaps the leather-workers should be excepted as they derive considerable gains from the hides of the cattle which

villagers.

Material condition of the people.

"If we are to judge by the standard of other parts of the Pravince . I should say that the state of the agricultural population was one of very considerable comfort. They are a simple people, and have few wants. Their food is good, and they have enough of it; and they are, according to Indian ideas, well clothed and well housed; while their fine physique plainly shows that they do not suffer much from deficiency of nonrishment, or from exposure to the elements. Amongst the lower menials in the villages (Chamars), and the classes in the towns which subsist by labour (notably the colony of weavers in the town of Ludhiana), there is at times a good deal of privation. The Chamars have fixed allowances of grain which are assured to them; but the other classes mentioned receive a cash wage, which is very low, and are sufficiently fed only when grain is

Agricultural people of the

"Amongst agriculturists the Mahammadaus, as a rule, are improvident, and live a haad-to mouth existence; but their possossion of the moist lowlands is an insurance against complete failure of the food-supply. The Gujars and Raiputs generally have dealings with the money-louder, and pay him in kind; and this makes it impossible for them to keep stores of grain. Their credit is good, and they can unfortunately raise money whenever they require it on security of the land, so that they never want for anything. An ordinary house in the Bot is comfortable, but will not he found to contain much of value in the way of jewelry or dishes. The cattle used for agriculture are very inforior; but the milch kine are good, as there is plenty of grazing ground; and the principal wealth, at all evonts of the Gujars, consists of their buffalo cows. The Arains and Awans mostly get on without incurring debt; and I believe that the number of Gujars and Rujputs who do so is daily increasing. There is also a fair proportion of men of all these classes who are able to advance noncy on the security of land. I have already referred to the Awans as keeping carts that work for hire, and some Rajputs have followed their example. The villages of the Ludhiana Bet derive great profit from the proximity of the city, in which there is a ready market for the sale of all sorts of miscellaceous prodoce. Although the mocey-lenders may seize on the grain, the straw is left; and io a year of drought this feiches a very high price, the people being able to sell it, and depend on the grass along the river and Budha Nála for the food of their cattle. In Sonicmber 1883 straw was very dear and there was a constant demand for it on the part of the Jaogal people. Many villages sold Rs. 400 or 500 worth within the last few days.

"The Hindu Jat is by nature provident. His house will generally be CHAP.II.C. found to contain valuable property in the way of dishes, jewelry and clothes, besides a sum in land cash. In the castern parts the most valuablo crops are the case and maize; and these must be taraed into cash soon after the harvest. But even here there is generally enough grain in store to last for a year. In the western villages (Jagraen and Pukhowal) the condition of the Jats is more than one of mero comfort. The houses are superior, there is a great display of jewelry and brass dishes, and the cattle are of a very high class. Almost every house contains a supply of hard cash; and the Rubi grain of two years (the Kharif dees not keep well, and is not stored) is generally kept till the third harvest is securo. A common sign of wealth in a Jut is some masonry work about his house; either an archway, or the whole porch, or even the whole house, is built of burnt bricks. Masonry work is more common in the west than in the eastern parts; but most villages have some house of it. Harelis or mansions belonging to Jats who have made money in service or by trade are springing up in many villages. I have elsowhere given an account of the manner in which the Jats have monopolized the carrying trade. They are able to take up the greater part of the land that is mortgaged, and would have it all, but that there appears sometimes to be a foolish prejudice against a man mortgaging to his sharik or co-sharer, the idea of which appears to be that a man's indebtedness is not likely to bo known, and he eaunot be twitted with it, if his creditor is of the banking class. I need not do more than allude to the large fortunes made in trade by the mercantile classes in Ludhiana and the other towns,

"This state of comfort and prosperity is entirely the growth of recent years. Under the Sikhs the cultivator had little room for saving left; and there was no opening for trade or for remanerative investment of any sort. The prices of agricultural produce were low; and it was not till twenty or twenty-five years ago that the improvement of communications raised them and brought a great deal of wealth into the district. This subject of prices is dealt with in Part II of this report, and it will be seen from what is written there that the great rise took place about twenty years ago, and that the average has remained very high ever since. The increase of wealth of the agriculturist has been accompanied by a good deal of extravagance shown in expenditure on marriage and other celebrations; and the sums commonly spent in this way are double or treble what they were thirty years ago. I have already alluded to the large sams paid for girls. The Jats of the eastern parts do not waste much money on such occasions beyond the actual price; but those of the west spend very large amounts on the edehration, and so do the Rajputs. To an ordinary cultivator in the Jangal or Jugaion villages a marriage in his family often means the expenditure of Rs. 500 to 1,000, even up to its. 1,500, and smaller sums go in hangitmaks or funeral feasts."

Section C.—Forests.

The only forest in the District is a plantation reserve at Ludhiana under the Deputy Conservator of the Bashahr Forest Part B. Division. It consists of a long narrow strip of 197 acros planted in 1867-68, and is composed entirely of shisham. It is situated on the Grand Trunk road midway between the Sutley and Ludhiana; the soil is sailib and subject to immedation by the Satlej. The income derived from it in 1901-02 was Rs. 2,914. There is also a Rakh of 179 acres adjoining the Civil Station, part of which is laid

Forests.

Hinda Jats,

CHAP-II,E. out with ornamental trees and flowering shrubs. Riding and driving roads intersect it in all directions. It is well looked after by the factures.

District Board, and produces an income of Rs. 1,187.

Section D.-Mines and Minerals.

Gordon The only mineral product is kankar, found in sufficient quantity at convenient sites, so that there is no difficulty in obtaining a supply for the metalled roads and for lime. Saltpetre used to be made in a few villages; but the manufacture has been given up.

Section E.—Arts and Manufactures.(1)

L-Hand The principal manufactures for export are the gur and shakar Industries, Sugariu- (raw sugar) made by the cultivators everywhere in the Dhaia from duetry. the sugarcane; the kha d or bura (refined) made at Machhiwara and Gordon Wolker, S. R, in its neighbourhood, and the cloths of Ludhiana. An account of § 188, the process of manufactures has already, been given in Section A. There are about 70 khánchís in Máchhiwárá, and 30 more scattered over the Bet belonging mostly to Khatris, but also to Banias, Sads and even Jats. The outturn of each press is estimated at upwards of Rs. 2,000 value in sugar (búru khand) and treacle (sírah) and in a good year for the trade, when sugar is dear, the contents of a khânchí may be worth Rs. 3,000.

Leather. Factories. Table 28 of Part B.

In Ludhiána town tanning is carried on by some few families of Khatiks who purchase the skins of slaughtered animals and prepare them for use. The prepared leather is worked by Bángrus and Mochis, and there is a large increasing trade in native shoes which are exported to the United Provinces and to Madras in considerable quantities. The price per pair runs from annas 14 to Rs. 2. The leather industry is confined to shoes, no saddlery being manufactured. In the villages the Chamárs are as usual the tanners and leather workers, making shoes, charsás, whips, blinkers, etc., for their villages. The cost of the shoes made by them is from annas 4 to annas 8 per pair.

Pottery.

The pottery of the District is of no particular importance. The industry is carried on by Kumbárs, Hindú and Muhammadan, who make the articles in common domestic and agricultural use. The Hindu potters also make toys in the form of gods, men and animals which they sell at the fairs held in the District. Muhammadan potters are of course forbidden by their religion to engage in this branch of the industry. There are 4 or 5 brick kilns (awa) in Ludhiána turning out small bricks measuring $6\times4\times1\frac{1}{2}$ inches which command ready sale at from Rs. 2 to Rs 2-12 a hundred. Large bricks $(10\times5\times3)$ are made in the Bull patent kiln and sell at Rs. 10 per hundred.

⁽¹⁾ This sention was supplied by Khwaja Ghulam Mohi ad-din, Honorary Magistrate and leader of the Kashmiri community.

Fleeces are largely-procured in the District, there being over CHAP.II,E. 35,000 sheep in 1902. The sleep are shern twice a year, in April and Octobor, having been previously washed (without soap or dip and Manuof any kind) in the nearest river or tank. The thread is spun by means of the ordinary charkhá or spinning wheel and it is weven on a loom somewhat stronger and coarser than that used for cotton but othorwise similar. Black blankets are made largely in Ludhiána Tahsil by Mazhabis and Chamárs, and are purchased as horse blankets by native cavalry regiments as well as being in demand by the cultivators of the District. Check and white blankets are made by the Muhammadan butchers of Jagraon. There is a small manufacture of numdahs in Ludhina.

Parhming.

The nashmina industry is that for which Ludhiuna is chiefly famous. The Kashmiri colony, from whom the bulk of the artizans are drawn, are said to have arrived at Ludhiana in 1833 when there was a famine in Kashmir, but the trade is now also largely followed by Punjabis. The raw material is of two classes—pashm, or the fine wool of the Tibetan gent; and Rampuri un, or that of the nearer hills. Both wools are brought finally from Rampur, which appears to be the entrepôt of the trade, by the Gaddis or hill-men, and now generally reach Ludhiána from Ambála by rail in Novembor or December. The wools are also imported from Amritan. A third class of wool is imported from Kirmán, in Persia, viá Karáchi and Lahore; socks and gloves are made of this wool which is not used in the manufacture of chadars or shawls. The annual amount of the sales of these wools is estimated at Rs. 25,000. The purchases are made in the first instance by Hindu merchants who take large amounts and retail them to a second class of traders, or to the Kashmiri and Punjabi. The wool is span into thread by women of all classes, Hindu and Mulummadan, rich and poor; and any woman can carn from one to three rupees a month by this. The maker gets a few rupees worth of wool or thread from the merchant (mahajan) and has it wovon into an almán or pieco 6 to 14 yards long and 11 yards wide. It is white in colour when it comes off the loom, but may be dyed red, yellow, green, &c., according to taste. Of this alván are made chádars which are purchased by well-to-do natives for wearing over the shoulders like an ordinary cloak, the piece being cut into two lengths of about 3 or 4 yards each, which are joined at the corners and worn doublo. The value of the chadars exported yearly is about Rs. 30,000, most going to the United Provinces and Lower India.

Rampur chadars, are made of pure wool in two sixes; one 4 Rampur chayards by 2 yards, the best quality selling at Rs. 60 and the second dars. at Rs. 25 each; the smaller size is 3 yards by 12 and sells at Rs. 20 a piece for the good quality and Rs. 10 for the inferior. The best quality are known as viceregal chadars or ring shawls. These chiddens are sold all over India, and the value experted is estimated at Rs. 15,000 yearly.

CHAP.II.E.

Arts and Manufactures

Shawle

The shawl industry (shál-báfi), or weaving from pashm thread of Kashmír shawls was originally perhaps the most important branch of all; but it has never recovered from the complete stoppage of the trade in these articles caused by the Franco-Prussian war. It is said that there were upwards of 1,000 Kashmíris engaged in it before that time, and an annual outturn of more than Rs. 1,00,000 worth of shawls; but France was the principal customer, and has ceased to take any since 1870. There are now only 10 Kashmíris who turn out the kamarbands worn by Native Cavalry. All the shawl work now done is in coarse wool, and known as jámewars; they are used as door hangings and given to menial servants as presents. They fetch only Rs. 4 a pair. There appears now to be no demand anywhere for good shawls. Native States used to take them for dresses of honour, &c., but do not now do so to anything like the same extent, and the pashmina trade is on the whole on the decline

Stookings and gloves. Stockings and gloves are knitted at Ludhiána, chiefly of Kirmáni wool. The annual value is estimated at Rs. 400.

Dyeing.

There are three or four Kashmíri dyers in Ludhiána town who dye pashmína chádars and thread. They can dye red, blue, yellow, kháki, green and other light colours.

Cotton.

Lungis.

The other important industry of Ludhiána town is the manufacture of cotton stuffs. The cotton is cleaned, spun and prepared for the weaver in the usual way. Ludhiána is famous for its lúngis and patkas (two descriptions of turbans) embroidered with gold thread. The unembroidered parts are imported from Hoshiárpur and embroidered in Ludhiána. Nearly every Native regiment wears Ludhiána-made lungis and there is a greater demand than the industry is at present able to meet. Technically these goods are excellent in colour and texture. A plain patka costs from annas 12 to 5 rupeos, and for lungin the prices range still higher. The "rich colour and close and soft texture" of the Ludhiána lungis were noticed by the Jury at the Punjab Exhibition.

Gabrún.

The town of Ludhiána is also famous for its check cloths called gabrún and for these goods there is a yearly increasing demand. These cloths are exported all over India and are worn in the hot weather by Europeans as well as natives. They are woven in pieces of about 20 yards long and about one yard wide, fetching from Rs. 2 to Rs. 6 a piece. The weaving is smooth and even, and English and American cotton yarns are worked up. These gabrúns scarcely seem to be as well known among European residents in the Punjab as they deserve to be, the Basel Mission at Mangalore and other works in distant parts of the country being indented upon for goods which could be equally well supplied from Ludhiána.

Other cotton

Coarse cloths known as khadar and dasúti are made in the villages in large quantities and command a ready sale in Ludhiána town. The towns of Máchhiwárá and Bahlolpur are famous for

súsi cloth. There are a few makers of durries in the town. CHAP.II.E. Towels, handkerchiefs, they and other stuffs are made in the villages.

factures.

There are a few Chhimbas in Ludhiana town who stamp cotton Cotton prints. cloths in colours, the finished articles being chiefly used as bed quilts (lihafs). The industry is also carried on at Rahawan in Samrala Talisil.

A great deal of English cotton yarn is dyed at Ludhiana for the manufacture of lungis and galaxins. The chief colours dyed are blue, kháki, hottle green and yellow.

Dyelng.

Embroidery in silk or gold thread on pashmina, merino, cotton Embroidery. and broadcloth is carried on in Ludhiana town by both Kashmiris and Punjabis. The work is of two kinds. The first, called karchobi, is a coarse work done on a frame, and is chiefly used for table covers and centres, door hangings, cushions, etc. It is chiefly done by boys of from 7 to 14 years. In the second kind of embroidery, called dori, the thread and work are finer. Some silk lungis are made, but owing to their cost they are going out of fashion. Helmet pagris, both plain and with gold fringes, are made in Ludhiina and exported all over India. There used to be a considerable outturn of phulkáris embroidered with silk, but the industry has decayed, being unable to compete with the superior articles produced in Jhelum and Rawalpindi.

Ludhiána and Jagráon are the chief centres of ivory turning in the Province. There are some turners (chungars) in these 1900. towns. They are Quraishis by race and the profession is hereditary. The organization of the trade is simple, the turner working at home and selling his work either to order or to casual customers. The tools used are described in the Monograph on Ivory carving in the Punjab by Mr. T. P. Ellis. This is the only District where billiard balls are manufactured. The trade in India is small owing to benzolino balls being preferable, and what trado there is is mostly export to Europe where it has to compete with firms who have the advantage of using material already seasoned to the climate of the market. The turner of billiard-balls can at most produce one set of three per day; the value of the ivery employed in a set is from Rs. 16 to Rs. 18. A turnor receives when working for a trader Rs. 3 a set. The balls are sold at Rs. 30 per set of three. Ivory bangles (chúri) uro turned at Ludhiána and Jagráon. The amount of work that an efficient worker can do in a day is large, he being able to produce about 8 sets of coloured bracelets a day, containing some 160 to 240 separate rings; the profits however, are small, amounting to not more than 11 num per set, i.e., 12 annas a day represents a workman's earnings. The supply of ivory is obtained through Amritsar agents from Burna, South Africa and Zanzibar.

CHAP.II.B. and Manuing, Silk,

The wood carving of the District is not important. Carved door frames such as are seen in the houses of well-to-do Hindús are of some artistic value and specimens of these were solicited for the Wood carr. Durbár Exhibition of 1902. Small articles of carving are also made.

> According to Mr. Cope of Haridi, in a letter written in 1858 and published in the Journal of the Agricultural and Horticultural Society of India, an attempt was made to introduce the silkworm at Ludhiána by Colonel Sir Claude Wade. He formed a mulberry plantation near his house and it is known that he succeeded to the extent of producing some ten seers of silk during the two years he carried on the experiment, which however was abandoned on his transfer to Kábul. "It is averred by one person that the silk wound by Colonel Wade was converted into silk stuffs at Ludhiána, while according to another authority it was sent to England. Nothing is therefore known of the quality, but it is certain that the worms he reared were the annual ones, as these only are found in the Hill State."

> Nothing further was ever done in this direction, and there is now no silk industry in Ludhiána beyond a certain amount of embroidery.

Oil pressing.

Rapeseed (sarson) is largely grown in the District, the annual output being estimated at over 150,000 maunds. It is either pressed in the village presses (kohlu) or the seed brought into Ludhiána; and large quantities are imported in seed from the United Provinces. The oil is exported largely to Europe.

Iron.

There is a considerable trade in iron at Ludhiána and Jagráon. The village of Raháwan in Samrála Tahsil is noted for its iron locks and implements, and Samrála and Dhenri for iron implements.

capper.

The brass and copper industry of the District is not on the whole important, and goods of this kind are largely imported from Jagraon, however, is famous for its brass vessels, and there are several villages in the District locally celebrated for this industry, such as Lalton and Sehna for vessels of brass and kánsi.

Corpentry.

The carpenters of Ludhiána are famous for good work, and chairs, tables, doors, door-frames, &c., are largely made. Carriages and carts on European models used to be made but the industry is now extinct; there is one shop in which rickshaws, such as are used by Missionaries in the plains, can be made.

Other hand manufactares.

Ropes of false hemp (sankokra), mats, sacks, twine, and netting (lengar) are made in the villages by Jats, Labánás, Sainis, Bauriás, Mahtams and Chuhras.

Gold and ailver.

Makers of gold and silver ornaments are found in most of the towns and villages of the District, those of Machhiwara being the most celebrated. There are only a few who can cut, polish and set gems.

The only factory in the District is that for ginning cotton at CHAP.II,F. Khanna. It is worked by steam and employs 100 hands.

There is no doubt that English and factory-made cotton cloth is displacing certain sorts of native cloth. The English cloth is cheaper and English colours and patterns attract the people so that even zamindárs have taken to English cloth. All agree that native cloth European is more durable, but fashion and cheapness weigh more in their eyes on local inat present than durability. The manufacture of native abra or dustries. chanda and susi has been unfavourably affected by English cloth, chintz more especially taking its place. This has so affected the dyers in some places that they have thrown up their profession and taken to washing, tailoring and even agriculture instead. Machine-made iron work has also affected the Lohárs. Native locks have come down in price and will probably be replaced by factory-made or foreign locks. Foreign or Indian factory-made sugar is displacing native sugar to some extent. It is said that the machine-made belng does not turn out as clear sugar as the old wooden belna. Native-made sugar, however, still remains popular in the Native States. The Mochis also are affected by the competition of factory-cleaned and dyed leather.

There are four large flour mills at Khanpur, Chupki, Akalgarh Mills. and Akhara on the Abohar Branch, and one at Jaghera in the Bhatinda Branch of the Sirhind Canal.

Section F.—Commerce and Trade.

A rough estimate of the total production, exports and imports of food grains was also framed for the Famine Report of 1879; and it was stated (page 151) that an annual surplus of some 4 lakhs of maunds was exported by rail eastwards, consisting chiefly of wheat and gram, with jowar and maize in smaller quantities. Mr. Gordon Walker wrote in 1884:-

"The District is self-feeding, and exports a good deal of food. The superior produce of the eastern half (sugar, cotton, wheat) is nearly all exported; but in place of this there is a large import of inferior grain (berra or mixed barley and gram, jowar, moth, &c.) from the Native States of the south, and our own villages of the western parts. There is a very extensive export of these inferior grains from the western half of the District, principally by the railway which passes through it."

The imports and exports of the District may (in 1903) be summarised as follows:-

Piece-goods are imported from the Bombay Presidency, Karáchi, Amritsar and Cawnpore; gold and silver lace and cord, braid, ootton and worsted, buttons (gilt and brass), military dress materials, regimental necessaries, billiard cloths and accessories, and medal ribbons from England; sugar (both khand and que) from the Juliundur Doab; iron from Karaohi, salt from Jhelum District.

Exports.

Imports.

CHAP.II,F.
Commerce
and Trade.

brass and copper-ware from the direction of Delhi; berra (mixed barley and gram) from the Native States to the south of Ludhiána; rice from Amritsar, Multan and Sabáraupur.

Exporta.

Wheat is exported to Europe by Messrs. Ralli Brothers, Sanday Patrick and Co., and J. M. Clements and Co.; mung, jowár, maize and rapeseed oil to the United Provinces and Lower Provinces of Bengal. Goods made of pashm, Ludhiána cloth (gabrún) and coarse cloth such as dasúti and khadar, and woollen socks and gloves to all parts of India.

Course and nature of the trade of the district, Gordon Walker, S. R. § 139.

It is difficult to describe the trade of the District apart from that of the country about; but the course that it takes is roughly as follows. The surplus produce of the western villages, consisting of gram (alono or mixed with barley or wheat), and the autumn millets and pulses, is brought up to the line of railway for export from the District, or finds its way into the eastern villages for consumption there. Very little of the gar produced in the eastern parts is consumed in them; and most of it is brought up on the epot by trading Jata from the Jangal or Malwa country, and taken away in carts or on camels, none of it going by rail. There is no demand for gur from the direction either of Lahore or of Calcutin, as those parts have their own supply. The sugar (bura and khánd) of Machhiwain and its neighbourhood is brought up on the spot in the came way as the gur or ie brought to the railway at Ludhiaus, and finds its way northward, as it is not made beyond the Beas, and is in great demand with the sweetmentmakere of Amritsar, Lahore, Multan, &c. There is a very considerable import of sugar, both gur and khánd, from the Jullandur Donb also, especially into the Jagraon Tahsil from the neighbourhood of Nakodar. Most of the cotton of the eastern parts is experted, but does not generally take the railway on account of bad packing and consequent high rates of oarriage. It is either taken back by the trading Jats in their carts, or carried by merchants in hired ones to Ferozepore, whence it goes down the Sutlej in boats. There is also an export of wheat from the eastern villages, the cultivators living on the inferior grains, some of which (mazz, massar, &c.) are produced in the Tahsil; but there is also a considerable import of gram, pulses, &c., from the west to cupply the place of the wheat.

Trading classes.
Gordon Walker, S. R. § 140.

The trade from the west is entirely in the hands of the Jats, who bring the grain in their own carts, and dispose of it themselves either at Ludhiand to the regular grain merchants, or in the villages. A Jat would not part with his grain on the spot, even if it were the custom for the merchants to go about the country, for he expects to get a better price at Ludbiana, and his cattle would be idle if he did not employ them in carrying. The return trade of sugar, cotton, &c., is carried by the carts that bring the grain, and these seldom go back empty; and in such transactions the regular merchant has no ebare at all. It has already been explained that the Jats of the unirrigated tracts to the south-west have a great deal of spare time, which they devote to trade; but that those of the east are tied down to their villages. Nearly all the gur and shakar sold in the District is brought up by the trading Jats from the cultivatore. The trade in the finer sugar products (khánd and bura) made in Máchhiwárá and its neighbourhood is entirely in the hands of the mercantile classes, A cultivator from Samrala Tabsil may make an expedition for three or four daye with his cart in search of grain when prices rise; but he cannot get far, as his crops would suffer. The cotton is either sold to some Jat who visits the village, or is bought up by the petty local traders who keep it

till the regular dealers come round, as they generally do to the larger towns CHAPJI,G and villages once a year. The grain on coming to Ludhisna is purchased from the Jots by the regular grain merchants, mostly men who have come communicaas representatives of firms in Delbi, Muzaffarnagar, Meornt, Saharanpur, &c. Thoro is also a considerable proportion of residents engaged in the trade.

Means of

"It is impossible to give any accurate estimate of the extent of trade of this District. Ludhiana railway station is the centre of trado for a very largo tract of country, embracing most of the Waller, S. R. Forozoporo District, and a great part of the Phulkian States; and § 142a. any attempt to determine how much of the grain trade coming along the Ferozeporo and Kotla roads belonged to this District would be mero gness work. The cotton from the east also for the most part comes from Ambala District, the centres of the trade being Korali and Morinda; but Samrala Tahail contributes comething. The number of carts coming in this direction is never vory large, the busy time being February and March. On the other hand, the press of traffic on the Ferozepore road is sometimes tromendous. It is pretty constant, the slack months being July-September, when the bullocks are generally sent out to grazo; and the busiest, May-July, when these who engage in trade in addition to agriculture are all on the read, and the granaries are all open. In May and Juno the road from Makha to Ludhiana is one long line of carts. Information is available as to the amount of grain that enters the municipal limits of the town of Ludhiana (which embrace the railway station), and also as to the amount that takes the rail at this place; but it is not possible to collect any as to the trade between the Jats of the west and the cultivotors of the eastern villages. The earts of the former struggle into the villages in great numbers, the owners sell their grain whore they can, and then collect leads of gur, cotton, san, kikar and other wood for rafters, anything that will sell down in their own country. The carts novor return empty. In disposing of their grain they may first try Ludbiana; and, if not successful there in getting a good price, go on to the villages, and even find their way into the hills sometimes.'

Extent of

Section G.—Means of Communication.

Since the opening of the Sirhind Canal the Sutley has ceased to Rivers and be navigable except during the rains.

There are ferries on the Sutlei under District Board manage-

Sherpur 28 miles from Ludhiáua, Jadwal 41 miles on. Khanpur bi miles on. Chaimla bi miles on. Jawala Mazra 21 miles on. Maltewara 24 miles on, Lisárn 3; miles on, Kariána 321 unics on. Khera 8 miles on. Bhandri 23 miles on. Sidhwan 6 miles on, Tiliara C miles on.

ment at the places marginally noted. The District Board pays an annual rent of Rs. 3,500 to Government for these ferries and sells the lease of each by annual auction in February. In 1903 these loases realised Rs. 5.895 · while supervision cost the Board Rs. 552. Between the ferries of Kariána aud Khora comos tho

Phillaur ferry, managed by the North-Western Railway.

Ferries.

CHAP.II,G.

Means of
Communication.

Ferries,

The whole of main line of the Canal 39 miles, of which 13 are in this District, is navigable. There are no locks on it. The Combined Branch is navigable for two miles, and the Abohar Branch for 48, of which 37 are in this District. The Bhatinda Branch is not navigable. Thus the Canal forms the most convenient route for both travellers and merchandise, from Rúpar to the North-Westorn Railway Station at Doráha and for merchandise alone right through to Ferozepore. The principal goods carried are timber, building materials and grain. The Canal Dopartment keeps several house boats on the Canal which are sometimes available for travellers through the courtesy of the Canal Officers.

Name of	lock.		B. D.	Distance between	
Bhawáni Hea	d Regu	lator	Head	 4+3,000	Patiála,
Khánpur Chupki Balowá! Akálgarh Togai Akhóra Dalla Dondhar		631 616 116	9+2,000 13+4,500 21+ 25+3,000 31+2,000	4+4,000 4+2,500 7+ 500 4+3,000 5+4,000 4+3,000	Ludhiáns. District. Ferozopore,

There are several locks on this Branch as shown in the margin.

Canal cross-

The following is a list of the places in this District where the Sirhind Canal and its Branches can be crossed:—

R, D, Miles,	Feet.	Bridges and Forries.					
		MAIN LINE.					
16 21 22 25 29 31 33 36 36 37	· 1,100 0 4,645 4,180 020 2,000 1,450 2,600 3,533 2,500 0	Bahlolpor Bridge. Powát Bridge. Ratipur Ferry. Garbi Bridge. Dhaadly Ferry. Killon Bridge. Katani Ferry. Rămpur Bridge. Kotta-Western Ruilway Bridge. Graud Trunk Road Bridge and of the Main Line.					

Roads.

[PART A.

R. D. Miles. Peat		Bridges and Ferries.	Means Commun
		ABOHAR BRANCH.	tion.
11	4,796 3,800 3,800 2,800 2,000 2,033 4,719 4,500 1,021 3,612 0 1,000 2,019 3,350 1,135 2,000 2,070	llegulator and Bridge. Bhagwaupar Ferry. 8' Fall and Bridge and Lock. Gawaddi Bridge. Bul Bridge. Bul Bridge. Chapki 8' Fall, Bridge and Lock. Ludbiácan-Dauri-Jakhal Railway Bridge. Assi Foot Bridge. Ballowál 8' Fall, Bridge, and Lock. District Road Bridge, Sahoki Foot Bridge. Akálcarh 8' Fall, Bridge and Lock. Sadhar Foot Bridge. 6' Fall, Bridge and Lock. Tegal Ferry. Haas Foot Bridge. Bordekt Ferry. Akhára 6' Fall, Bridge and Lock, Dela 6' Fall, Bridge and Lock, Rasulpur Ferry. RI ATINDA BRANCH.	Canal er ings.
0	***	Regulator and Bridge,	
0	2,200 311	Khotra 8' Fall and Bridge,	
8		Hothri Foot Bridge.	
10 11	3 ,900	Jhamat Foot Bridge, Joghera S' Fall and Bridge,	

(i) The Zero from which Reduced Distances are measured on the Abohar Branch is at the Regulator at time Read of the Branch.

The North-Western Railway enters the District from Phillaur by the Sutlej bridge and runs through it for about 35 miles in a south-westerly direction. The stations are Ladhowál, Ludhiána, Sahnewál, Doráha, Cháwa, and Khanna, of these Doráha is in Patiála territory. The Ludhiána-Dhuri-Jakhal Railway has its terminus at Ludhiána and runs through the District in a southerly direction with stations at Gil, Raikot Road, Chappár and Kup. A line from Ludhiána riá Ferozopore and Fázilka to McLeodganj is now (1904) nudor construction.

Generally speaking the roads of the District are very good. All the larger towns are united up by roads, whether metalled or not, over which wheeled vehicles can travel easily and fast. Shigrans, elkds and majholis are used by travellers while agricultural produce is generally carried in bullock carts.

The following roads are maintained by-

				·
No.	Roods.		Length.	Remarks.
	· · · · · · · · · · · · · · · · · · ·	A.—PRO	AIDZIY	L REVENUE.
2 1	Grand Trunk undhiáns-Forezopore Divit Statiou	200 245 803 527 889 275	Miles. 85 26 10	Managed by the District Board fo Rs. 1,670 per annum. Vide Punjab Govern ment Resa. No. 1171 of 27th June 1892 (Financial Department).

Railways.

Roads.

Unmetalled roads.

PART'A.

Means of No. Communica.

				=
No.	Ronds.	Length.	Remarks.	
'				-

A.-DISTRICT FUNDS.

Roads.

METALLED ROADS UNDER DIRECT MANAGEMENT.

			1	Miles.
1	Bamrala-Khanna	400	•••	5
2	Ludhiána-Kohára	***	***	10
3	Bohnewal-Kohara	***	***	2.2
4	Jográon-Raikot	404	***	13.75
5	Jogi Mazra-Malandh			4.09
6	Chokkar-Jamálpur	***		2
7	Bogrian	104	*** [2
			- [
	i	Total	- 444	34.34

METALLED ROADS MANAGED BY PUBLIC WORKS DEPARTMENT MAINTAINED BY DISTRICT BOARD.

1	Kohára-Samrála		11	Nos. 136 and 138, dated 20th January 1699. For Rs. 2,459.
2	Samrála-Máchhiwárá		6	Nos. 178 and 180, dated 26th January 1899. For Rs. 1,441.
3	Ludhiána-Kotla		17.5) '
4	Dháka-Raikot		15'0	i
5	Jagraon Tahsil to city		2	Nos. 1264, dated 13th July 1884, and 1442
6	Nabha Railwoy Approach Road		*81	and 1444, dated 27th July 1902. For
7	Chima		1.2	Rg. 14.107.
8	Sahnawil		*22	
õ	Whenne	- 1	-28	
•	Withorns II et	***		•
	Total		36'41	

METALLER ROADS CONSTRUCTED BY PUBLIC WORKS DEPARTMENT MAINTAINED BY DISTRICT BOARD,

10 11 12	Gill Railway Chappár,, Baikot ,,		***	***	Not yet mea- sured.	} No.	1599, dated 30th Jr	100 .]	For Rs. 950 .
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Unmetalled roads under District Board.

The principal unmetalled roads are:-

- Ludhiana to Raikot, commonly called the Lalton road, 22 miles: planted with roadside trees throughout, a few sand-drifts near Tapur, otherwise good for wheeled traffic: in use.
- Ludhiana to Tihara, the old Ferozepore road, 26 miles. Fit for wheeled traffic as far as Bar Nahala, one or two sand-drifts near Malakpur, Haibowal Kalan and Rajpura: in uso.
- 3. Ludhiána to Núrpur: 7 miles village road, in fair condition.
- Ludhiána to Mattewára, on the banks of the Sutlej, 9 miles: planted
 with trees throughout. Fit for wheeled traffic. Small sanddrift near Ludhiána on the further side of the Budha Nálá, used
 largely as terminus with ferry.
- Jagraon to Sidhwan, 8 miles: planted with trees throughout: raised for wheeled traffic, in uso; ferry at river connecting with Jullundur District.
- 6. Jagraon to Ghalib, 5 miles: planted with trees: a village road.
- 7. Jagraon to Hathur, 13 miles: village road.
- 8. Jagraon to Tihara, 9 miles.

PART'A.

Carriage.

9. Machhiwara through Sahnewal and Pakhowal to Raikot, 361 CHAPII',G. miles: much used from Kohara to Raikot; fit for wheeled traffic; it is under consideration to motal the portion between communication in the manufacture of the manu Salmowal and Raikot; thereby connecting all three Tahsils by metalled roads. Unmetalled

10. Samrála to Baldolpur, 10 miles : villago road.

11. Samrala to Kheri, 14 miles: village road.

12. Samrale to Isru and Khanna, 19 milles: villago road.

The bridges are as follows:—

Masonry bridge over the Budha within municipal limits on the Grand Trunk Road to Phillaur: managed by Public Works Department,

.2. Iron Railway Bridge over the Budha within municipal limits; under Rulway management. 3. Masonry and iron bridge over the Budha Nala at Machhiwara:

under District Board. 4. Masonry bridge over Budha Nálá at Bahlolpur; under District Board.

Mr. Gordon Walker wrote in 1883:-

"The District returns show 11,659 carts belonging to people of the District; but I think that this includes the ordinary carts

village note-books the number of earts working for

hire, that is, those going to Ludhiana and beyond it

used for agriculturo.

Bamrain ... 2,651 Ludbiána Jagráon ...

with loads of grain, &c., (dasáwarwála), and the total of these entries is 5,564 distributed as shown in the margin.

"This return is probably not far out. It will be observed that there are Prices and very few in Samrala; and those of Ludhiana all come from the south-west, Communica-

The cart used in the carrying trade is a development of the ordinary field eart. I am told that iwenty or thirty years ago, when the carrying trade was in its infancy, carts of the size now generally used were almost unknown. When the people began to make trading expeditions they fixed to their earls a wooden frame, wider at the top than below; and lined this with the old stalks of the sugarcane, cotton twigs, cloth, &c. But an ordinary eart of this sort, drawn by two or three bullocks, could only earry fifteen maunds (pakka) of grain; and it was not long before the udvantage of widening and lengthening the earts was seen; and they are new, at least most of those that come from the west, of a very superior pattern, drawn generally by five bullocks, and enpable of carrying forty to fifty maunds of grain. Thoframo work of the sides is very strong, and lined with tat (called tapar) or matting madoof san. Over the top is kept a thatch of munj reeds; or, if the owner can afford it, a thick carpet of wool, called khar, woven for the purpose. The latter is a perfect, and the former a partial protection from the rain." A first class cart will cost with all its appliances Rs. 100, and five bullocks, Rs. 250 to 300. Of course there are still a great many earts working, which are not of the first class. Along the metalled roads the carts go easily, and they can cover 20 miles, or two stages in 24 hours, but they have generally considerable distances along ordinary district roads before these are reached, and it requires at least the five bullocks to drag them even slowly through these. On the Ferozepore road one or two of the bullocks are generally to be seen tied up behind as a reservo. The heaviest

loads come from the Ferozeporo District (Moga and Zira), as the country to the south of Raikot is so very sandy that not more than about 300 maunds

Bridges,

Board.

roads under District

Means of carriage,

Walker, S. R. We have entored in the

Prices and Communications,

CHAP.II,G. can be brought up to this place. A metalled road from Raikot to Sahna would be a great benefit. The Jat cartmen either dovote the whols of their time to Communica. carrying, or only what they can spare from agriculture, which are the busy tion. months of the grain trade. In the former case, the cartman is either a member of a family who have a joint holding, or he mortgages his land to another cultivator, getting a lump sum down for the use of it which he is always able to repay. The grain carried almost invariably belongs to the man who owns and drives the cart, for the Jats will not work for hire or carry for dealers. The cart is filled partly with the grain grown in the holding to which the cart belongs, and the load is made up by purchaser in the village, or in others about.

> "Camels come direct to Ludhiána from the Jangal villages by the unmetalled roads, carrying grain; and return with gur, salt, &c. They are useful where the roads are particularly sandy, and only a small load could be brought on a cart, a camel load is about six to eight maunds. Donkeys are used for bringing grain, gur, &c., from short distances into Ludhiana, eight or ten miles. A donkey carries 11 to 2 maunds. In 1879-80 the Deputy Commissioner supplied to the Transport Department 3,500 camels, 838 carts, 100 mules, 123 ponies, and 2,302 camp-followers drawn in part from the Native States across the border.

Encamping grounds and Sardis, § 149,

"In Ferozepore and Ambila roads are a good deal used by troops marching in the cold weather, and there are encamping-grounds at Jagmon, Dakho, Gordon Ludhiane, Durane-ki-Sarai (in a slip of Patiala territory) and Khanna, with the Walker, S. R. usual supply-house and sarai at each. There are several large private sarais in Ludhiana city, and one built by a benevolent native in Jagraon. There is a fine old imperial sarái within a few miles of Khanna on the Ludhiána road. It is called Lashkari Khan's and was built in the time of Aurangzeb, but it is quits out of place now and never used. There is no traffic to speak of along the Ambéla road on account of the railway; but the Jagraon and Dakha encamping-grounds with supply-houses at Kohara and Samrala, on the Samrala road, which is now very rarely used by troops, but was formerly the highway to Simla and the hill stations from the Ludhing cantonment,

Bungalows Table 30 of Part B.

"There is a regular dak bungalow at Ludhiana (with a khansamah), and and rest. this is very much used by Europeans, who are passing through from Ferozepore Gordon or have business here. There are district (or police) bungalows at Machbiwara, Walker, S. R. at Kohára and Samrála on the Kálka road; at Khanna and Salmswal on the Anibala road; at Dahlon on the Maler Kotla; and at Dakha and Jagraon on the Ferozepore roads; but these are very poor (except Part B. that of Kohára), being in most cases the burj or corner of the talsil Polymetrical building or of a scrái. The old Residency House at Bassian, built in 1838, is still kept up with its gardens and grounds which cover an area of 70 to 80 acres. Although a good part of the building has been pulled down, what is left is too much to be kept in good repair. It is a pleasant place to spend a fow days at, as the locality is one of the healthiest in the District. There are Public Works Department bungalows along the Ferozspore and Ambála roads at Khanna, Pindori (near Dakha), Jagraon, which have fair accommodation, and are available for district officers. There are canal bungalows at distances of ten miles along the branches of the canals; but these are generally occupied by the officers of the Department or by subordinates. The statement (1) on the next page shows the recognised rontes and stages with the accommodation, &c., for travellers to be found at each. The first halt on the road to Lahore is at Phillaur in the Jullundur District."

The post offices of the District are under the Superintendent of Post Offices, Ludhiana Division. Mails are carried by Mail Cart from Ludhiána to Jagráon and by shigram from Ludhiána to Samrála, and there is a District ckka dák from Raikot to Wataha. On the remaining lines, Imperial and District, the mails are carried by runners.

There are combined post and telegraph offices at Jagraen, Part B. Ludhiana and Khanna, and Railway Tolograph offices along the North-Western and the Ludhiana-Dhuri-Jakhal Railways. There are also lines along the main line and both branches of the canal under the Canal Dopartment.

CHAP-II, H. Famine.

List of Post Table 31. Working of Past Office Table 32 of Telegraphs.

Section H.—Famine.

The earliest famine of which men talk is that of Sambat 1787 History of (A.D. 1730). The memory of it is preserved in the saying satassiake scarcities. mária hua, applied to a man who has got food and rofuses to feed a Walker, S. R. starving beggar; but no particulars are forthcoming as to how the 5 124. people lived, or what was the extent of its ravages. There was drought in 1759 and again in 1770, but apparently no famine; and the effects were only felt for a few months. The memory of these visitations has been effaced by that which followed. The terrible famine of Sbt. 1840 (A. D. 1783), called challa appears to have spared no part of northern India, and this District suffored with the rest of the country. It began with the failure of the autumn rains of Sht. 1839, there being little or no yield in the Kharif and following Rabi harvests. Prices rose from Bhádon (Sbt. 1839), and by Baisákh (Sht. 1840) wheat was selling at 20 sers kachcha (8 sers pakka) a rupec. Rain foll in Hur, but not after. Sambat 1840. wards; and the Kharif crops of Sbt. 1840 all withered. In Katak of that year wheat was at 8 sers kachcha (35 sers pakka) a rupeo; and, if we consider the difference in the value of money then and now, we may realize the extent of calamity from this. The Rabi was not sown except at the wells, of which there were not nearly so many as now. In Chot Sbt. 1841 there was rain: and in Hár the usual autumn falls began. The Kliarif and Rabi following were very good. The pressure of famine lasted nearly 21 years altogether, and the mortality must have been tremendous. Grain could not be bought for money; and people are said to have died with bags of rupoes under their heads. All natural affection was lost sight of, and paronts robbed their children of their food, and looked on to see them die. Many emigrated beyond the Jumna, where there appears to have been something to live on. People are even said to have been driven to cannibalism. The cattle died everywhere; and, when the rain did come, men had to drag the plough through the fields. The green crop was caten whenever the heads were formed, and many people lost their lives from sickness brought on by improper food. Famine was as usual followed by

villages."

CHAP.II,H. disease. When the people were ablo to resume the cultivation of their land, the country gradually recovered its prosperity; but the Famine of horrors of the chalia will long be remembered. It is worthy of remark that not a single village was totally deserted in this famine. Proprietors abandoned their land here and there, and many must have died; but the mass of them adhered to their villages, probably in most cases because there were wells at which the survivors could eke out some sort of existence. The history of no village contains any allusion to its having been deserted at this time; and the few that date their foundation from a later period than the chalia were settled by the ruler of the time in the surplus area of some old village contrary to the wishes of the rightful owners.

Famine of Sharif of Sbt. 1868 and Rabi following were poor, and fodder scarce. Rain fell at first, but stopped, and the Kharif of Sbt. 1869 and Rabi succeeding failed, except at the wolls. Grain rose to 18 sers kachcha (7 sers pakka); and straw was not to be had. There was a tremendous loss of cattle, and except at the wolls. The autumn rains of Sbt. 1870 were good, and prices foll. The loss of human life was not perhaps very great, and was confined to the poerer classes, labourers and artizans, in the towns and

"The history of the nabia or scarcity of Sbt. 1890 (1893 A. D.) is as follows. Grain was selling at two mannds (publia) a rupee when it began. The autumn rains of Sbt. 1890 failed; and the two harvests produced almost nothing except at the wells, where carrots and other vegetables were grown. The loss of human life and of cattle appears not to have been considerable; and the price of gram was never higher than 17 sers pakka; but this was of course very dear for those times, and would mean 8 or 10 sers a rupee now. In Sbt. 1894 there was a scarcity, but not of much severity. The people had not, however, recovered from the ninety. Witness the couplet:—'Saved from the 90, succumbed to 94; there were clouds by day and starry nights.'

Sambat 1917. "Of the next scarcity, that of A. D. 1860-61, we have official information. The account for this District is as follows:—The Rabi of Sbt. 1917 (1860 A. D.) was poor, the winter rains having failed; and the price of wheat rose to 34 sers pakka by Baisákh. There was rain in Húr, but not in the following menths; and the Kharíf was sown, but withered. There was a great grain on the grain stores of this District, caused by the scarcity in those to the senth; and the price of wheat rose till it reached at one time 7 or 8 sers a rupee. The Rabi was very poor, but did not fail entirely; and the rains of 1918 were plentiful. There was a great scarcity of fodder and a considerable loss of cattle; but none of human life from actual starvation, in the villages at all events. It was a famine in the Bángar country (Rohtak, Hissár, &c.), and numbers flocked north-

wards from those parts. The people say Kál Bángar then upje CRAPILE. bura, i.e., "a famino coming from the Bangar is bad." The stores Famine. of grain were sold at an immenso profit, which probably more than Sambat 1917 componsated for the loss of cattle. The scarcity of Sambat 1917 will be found to be the turning point in the fortunes of many agriculturists of the western and Jangal villages. Most of thom had grain in store; but the unlucky few that had not were compelled to incur a debt of which they have nover get rid. Mortgages in Jagraen Tabsil can be as often as not traced back to the "17" (satárah) or the following "25" (panji). There was some acute distress among the lower classes in the towns; but the whole famine exponditure appears to have amounted only to about Rs. 6,000; and, although a suspension of 3 per cent. of the revenue was considered necessary, the balance was soon realized. Captain (afterwards Colonel) McNoile wrote in 1861 that the money-lenders were complaining that the Jats had paid off all their debts and taken the grain trade completely out of the hands of the regular morehants.

"The searcity of 1869-70 was, as regards this District, of much Sambat 1925, the same character as that of 1860-61; but the harvests were better, and the injury done was confined to a not very considerable loss of cattle, and to dobt incurred by individuals from this cause or from their having to purchase grain for food. Wheat went as high as eight or ten seers a rapeo; but the people affected by this were as usual the artizans and labourers in the towns. There was on both occasions a good deal of immigration of starving people from the south. The whole expenditure on relief works amounted to Rs. 7,000, incurred entirely in the towns. On the other hand the mass of the agricultural population, at all events of the western parts where the effects of famine ought first to be folt, profited greatly by the high prices as in 1860; and the advantages to them as a whole far outweighed the ovils. Nominal suspensions to the amount of Rs. 2,500 were sanctioned; but the balances recovered next year."

"In the reports of 1877-78 Ludhiána is shown as "unaffected." 1877-78 A.D. The barvests were very fair; but prices were run up to famine rates in consequence of the demand from the North-Western Provinces, Madras and Bombay. This was to the entire benefit of the cultivator, and to such as had stores of grain.

The opening of the Sirlind Canal in 1884 has rendered the 1896-07 A.D. District practically secure from famino. In noither of the famines A.D. which visited the Punjab in the decade 1891-1900 was even scarcity declared to exist in Ludhiuna, and the District steadily exported food grains throughout the worst of the famine. At the same time the poerer classes suffered more or less from high prices, especially in the Jangal tract; and, though there was no great movement to other Districts, there were few families of the poorer classes one or two members of whom did not emigrate in search of omployment,

CHAPTER III-ADMINISTRATIVE.

Section A.—General Administration and Administrative Divisions.

CHAP. III, A. General Adminis.

tration and Administrative Divisions.

Adminie. trative Divisions,

cers. Zailddrs. Table 83 of Part B.

The District which lies in the Administrative Division of Jullundur is under a Deputy Commissioner, who is assisted by four Assistant or Extra Assistant Commissioners. The District contains no sub-division, but has three Tahsils-Ludhiána, Jagráon and Samrála—each under a Tahsíldár and Náib-Tahsíldár. Zaíldars and lambardars are appointed in the ordinary way according to the rules under the Land Revenue Act. Regarding the raildari system the Settlement Officer wrote as follows in 1883:—

"It was feared that the introduction of the systom might interfere, with Village offi- the semblance of local authority, still preserved by somo of the larger jagirdars. The jagirs of Malandh and Ladhran wore, therefore, excluded from its operation. In the rest of the District the zails were arranged within the Tahsils, so far as was possible, according to tribes; although in many places it was found quite impossible to group togethor villages so as more than partially to secure this object. The Bet tract is in the hands of a Muhammadan population, belonging to the Rajpot, Gujar, Jat, Arain and Awan tribes; but the villages of these are, as a rulo, so mixed up that, although it may be said that one or other of the tribes predominates in a cortain portion of the lowlands, we could not arrange any single acil so as to consist ontirely of villages of the samo tribe. Muhammadan Rajputs and Jats own most of the Samrala and Upper Ludhiana Bet tracts; while in the lower part of Ludhiana and Jagraon the Gujars are in a great majority. Amongst the Jats of the uplands it was in like manner impossible, except in the case of the Garewals, whose villages are grouped together to the south-west of Ludhians, to arrange the zails by gots. The peculiar disadvantages under which the system appears to labour in Ludhiana is the weakness of the tribal organization, for I know of no District where want of union amongst the agricultural population is more marked. If villages lie in groups, each belonging to one tribe or got, it is certain that one or two men will be regarded as the heads of the tribe or got; but in Ludhiana there is very little tribal feeling anywhere, and almost every single lambardar in each zail was a candidate for the appointment,"

The zaildári cess was calculated at one per cent. on the land revenue at Settlement and up to 1887 was paid from the revenue of each village in the zail when each zaildár's remuneration was assigned in the form of an inam out of a single village, in a fixed sum for the term of Settlement irrespective of fluctuations in the land revenue. A list of the sails in the District is given below :---

CHAP.

LIST	OF	ZAILS.
------	----	--------

						JF ZA			III, A,
No.	Tahyf),	Namo of sai	Number of villages (1903-01).	Total Assessment (1903-01).	Zaildāri fos (fixed).	Name of the village, from the revenue of which fee is paid.	Provuiling tribes: M.=Muhemmadan, H.=Hindu.	General Adminis- tration and Adminis- trative Divisions- Zaildars. Table 33 of	
1 2 3		Bahlolpur Sainsowál Kal Powát	śn	24 41 15	16,006 19,418 18,732	172	Bhillon Sainsowál Kaláo Powát	M. Jats and Rájpúts Do. do. Ditto with a fow H.	Part B,
4 5 6 7 8 9		Kutéla Utáláu Mal Mázra Bhari Kheri Lohér Másra Raháwan	***	16 13 14 11 17 16 12	15,754 21,637 20,803 17,635 18,643	150 211 200 173 182		Jats, otc. H. Jats and Rajputs H. Jats. Do. Do. Do. Do. H. Jats and M.	
11 12 13 14 15 16	Samréla,	Salandi Bupálou Mohappur Aikoláhá Isra Dhiro Mázra Jabo Mázra	***	79 13 15 11 4	17,285 19,752 19,172	171 191 189 160 56	Parbá Rupálon Molanpur Bír Kishan Singh Iern Dhìro Mázra Jalio Mázra	Rájpúts. H. Jats. Do. Do. Do. Do. Do. Do.	
		Total Excloded fr zaildári (Ladi jágír) Total Tahaíl		25 E3 E3	24,810 24,835	2,800 2,800 2,800		II. Jols.	
18 10		Baliwál Katani Koláo	•••	26 16	,		Halowál Kotgangu Roi	di. Juis, Rájpúts, Gújurs, otc. H. Juts.	
20 21 22 23 24 25 27 28 29	ť	Chaunto Mintiwara Bholapor Gill Sahnowal Umedpar Laiton Baddowal Sanot Lodhisoa	100 100 100 100 100 100 100 100	25 17 12 16 16 12 16 12 36	19,251 16,865 20,296 17,689 10,087 17,748 21,656 21,459 19,076	191 172 197 170 187 174 218 213	Kum Kalan Matowara Bholapur Gill Sahnowal Umedpur Lálton Báddewál	M. Rájpúts, Gújars, oto. Do.	
30 31 82 82 84 85 86 87 88 39	Ludhiśua.	Kasa 'abad Narpur Daklin Ralpur Shankar Shankar Butahri Ghonjrana Dhulkot Pakhowal Tajpur	*** *** *** *** *** ***	81 23 12 9 14 6 13 11 11	16,002 17,873 10,105 21,016 8,033 17,278 18,728 17,207 18,284	163 176 194 207 80 172 180 174 180	Halpar Shankar Hans Ghunjrana Gijarwai Lii Tajpur	castes. Awáns. M. Gújars, etc. II. Jats, etc. II. Jats (Garowál)	
		Total	•••	381				2.,	

									,	
a	No.	Tah	sil.	Namo of zail		Number of villages (1903-04).	Toinl assessment (1903-01).	Zaildári feo (fixed).	Name of the village, from the revenue of which fee is paid.	Prevailing tribes. M.=Mnhammadan, H.=Hindu.
of				Excluded fr saildán (parg Malaudh Total Tabsíl		71 452	96,485 517,408	.		II. Juts.
	41			Bhundri	•••	22 22	17,037 21,469		Gorsián Qadin Bakhsh Katwál	Rájpúts.
	42 43 44 45 46 47			Sidhwan Bet Ghalib Kalan Sawaddi Mandiani Uans Jograon	***	13 15 12 0	19,873 20,824 16,91 17,46	3 19- 0 20 9 16 8 17	Ghálib Kalán Jandi Mandiani	Gújars. H. Jats, etc. H. Jats. Do. Do. Do. Cújars, Rájpúts,
	48 49 50 51 52 53		Jagráon.	Kaonko Akhára Mallah Lakha Bussián Roikot	***	5 5	14,57 13,70 19,39 18,79	6 14 5 13 3 18	7 Rúmi 7 Malhah 6 Lakha 7 Rúmgarh Sidián.	Do. Do. Do.
	54 58			Akúlgarh Mohi	•	. 11				II. Jats and others. H. Jats,
				Total		17	281,10	2,70	- 04 -	
	T:	otal ct.	Die	Total zaildár Exoluded *f zaildári	ror	\	-	-		
				Total		90	2 11,11,9		-1	

Before the time of the Regular Settlement the lambardárs or were a strong body, well paid and selected as really leading members of the agricultural class; but in the inquiry which was then made their number was more than doubled. Even yet the pay is generally very fair in the Dhaia; but in many Bet villages lambardars receive as little as Rs. 2 to 3 a year, and there is often very little to distinguish them from the rest of the proprietary body. Not one in a hundred keeps a horse or pony; and their sole idea of duty to Government is that they must realise the revenue and their own allowance. In fact until about 1880 the first of these duties was relogated to the patwari, who regularly accompanied the lambardars when taking the money to the Tahsil, in case it might be misappropriated. It is, perhaps, a sign of progress that the authority of the lambardars, such as it was, is daily diminishing; but a further weakening is likely to lead to much administrative inconvenience. In many villages the sharers, though perfectly able to pay their revenue, neglect to do so, well knowing UDHIANA DISTRICT.

PART A.

at the lambardars will got into trouble, and the latter has at best very clumsy remedy against defaulters. A proposal was made 1896 by the Deputy Commissioner that the number of lambardárs the Bet should be reduced. The principle was accepted by tration and overnment and is to be acted on as the posts fall vacant. The abjoined list shows the number of zaildars, sufed poshes, lambarirs and chaukidars in the District in 1903:—

CHAP. III, A. General Adminis-

> The lambardars or village headmen.

Divisions.

J/1001010											
Zaildars' annual Pay.		Sufed posites' Annual pay.		Laub	Andars' 1 Pay.	Village chauri darb' monthly pay.					
No.	Max.	Min,	Ne.	Muz	Min,	Ñe.	Max.	Min,	No.	Max	Min,
			_								
23	213	80	51	80	20	1,341	on land		464	8	2
15 17)		217 286		2 2
55	·	9,659	117		2,740	2,648	5	4,709	917		
(Avera	ge por	176			23			••		***	
	No.	Zaledars' an FAY. No. Max. 23 213 15 208 17 210 55 (Average per	ZAILDARS' ANNUAL PAY. No. Max. Min. 23 213 80 15 208 137 210 50 65 9,659 (Average por 176	ZAILDARS' ANNUAL SUF FAY. Min. No. No. Max. Min. No. 23 213 80 54 15 208 187 30 17 210 50 33 65 9,659 117 (Average per 176	ZAILDARS' ANNUAL SUFED POR ANNUAL NO. Max. Min. No. Max. Min. No. Max. Min. No. Max. Min. No. Max. Min. No. Max. Min. No. Max. Min. No. Max. Min. No. Max. Min. No. Max. Min. No. Min. Min. No. Min. No. Min. Min. No. Min. Min. No. Min. Min. No. Min. Min. No. Min. Min. No. Min. Min. No. Min. Min. No. Min. Min. Min. No. Min. Min. Min. Min. Min. Min. Min. Min	ZAILDARS' ANNUAL SUFED POSHES' ANNUAL PAY. No. Max. Min. No. Max Min. 23 218 80 54 80 20 15 208 187 30 30 20 17 210 50 33 30 20 65 9,659 117 2,740 (Average per 176 22	ZAILDARS' ANNUAL SUFED POSHES' LAMB ANNUAL PAY. No. Max. Min. No. Max Min. No. 23 213 80 54 30 20 1,341 15 208 137 30 30 20 557 17 210 50 33 30 20 750 65 9,659 117 2,740 2,648 (Averago por 176 23	ZAILDARS' ANNUAL SUFED POSHES' LAMBARDARS' ANNUAL PAY. No. Max. Min. No. Max Min. No. Max. 23 218 80 54 80 20 1,341 5 p. c. on land of the 17 210 50 33 30 20 557 750 . 65 9,659 117 2,740 2,648 5 (Average per 176 23	ZAILDARS' ANNUAL SUFED FOSHES' LAMBARDARS' ANNUAL PAY. No. Max. Min. No. Max Min. No. Max. Min. No. Max. Min. No. Max. Min. No. Max. Min. No. Max. Min. No. Max. Min. No. Max. Min. No. Max. Min. Min. No. Max. Min. Min. No. Max. Min. Min. No. Max. Min. Min. No. Max. Min. Min. Min. Min. Min. Min. Min. Min	ZAILDARS' ANNUAL SUFED POSHES' LAMBARDARS' ANNUAL PAY. No. Max. Min. No. Max Min. No. Max. Min. No. Max. Min. No. 1.311 5 p. c on land revenue of the village. 217 210 50 33 30 20 7557 236 55 9,659 117 2,740 2,648 54,709 917 (Average por 176 23	PAY. ANNUAL PAY. PAY. PAY. DARS MONT PAY. No. Max. Min. No. Max Min. No. Max. Min. Min. No. Max. Min. Min. No. Max. Min. Min. No. Max. Min. Min. No. Max. Min. Min. Min. No. Max. Min. Min. Min. Min. No. Max. Min. Min. Min. Min. Min. Min. Min. Min

Of the three Tahsils Ludhiána would appear to be inconveiently large. But the whole of the Malaudh pargana is held in ágir by the family of the Malaudh Sardárs, the land revenue of heir estates being Rs. 85,077. The revenue and cesses are ordiarily paid by the lambardars to the jagirdars themselves. This rrangement for direct collection is a convenience to the people and lessens the land revenue collection work of the Tahsil materially.

Wards, namely, those of-(1) Gur Bachan Singh of Kotla Ajner, which consists of 30 acres only with an income of Rs. 1,154. The liabilities

There are at present (1904) three estates under the Court of

(2) The late Sardár Mahtáb Singh of Ladhrán, who had no landed property. The jagir brings in Rs. 8,980 annually and the liabilities are nearly Rs. 26,000.

of the estate are about Rs. 14,000.

(3) Dalip Singh of Ladhrán, who has an estate of 77 acres. His income is Rs. 3,704 and his liabilities about Rs. 14,000.

Ludhiána is the head-quarters of the 1st Division, Sirhind Canal, with an Executive Engineer, who is under the control of other Departments of Police is under the Deputy Inspector-General, Eastern Circle, at Lahore. The Grand Trunk Road and public buildings,

Offices of

together with certain other roads in the District, are under the CHAP. III, B. Executive Engineer, Juliundur Division. The forest plantation (see above page 153), is under the Deputy Conservators, Bashahr Justice. Offices of Division. The railways in the District are controlled from Saháranother Depart- pur. For Post Offices and Telegraphs see page 167. ments.

Section B.-Justice.

The District Judge of Ludhiána is under the control of the Civil Jostice. Table 85 of Divisional Judge of the Ambala Division. There is a Sessions Criminal House at Ludhiana with a Court room and sufficient accommodation Justice. Table 84 of for the Sessions Judge.

Port B. Panehayate,

A system of village panchayats was introduced into certain villages in this District in 1896. Rules of procedure, based on the Ambála rules were framed, in the first year no less than 1,325 cases, involving Rs. 56,360, were settled by these bodies. After that, however, the number of cases decided annually by the panchayats gradually dwindled, and since 1900 no cases have been brought before them.

The character and disposition of the people is thus described by Mr. Gordon Walker:-

Character and disposition of the people.

"I have already (see p. 74 supra) considered the character and disposition of the various tribes which composes the rural population of the District; and I hope I have made it plain that the mass of the people are quiet, contented and law-abiding. The exceptions are the Gujars, perhaps the Rajputs, the criminal tribes of Harnis, &c., and to these I may add the rabble of the towns. I do not think that the people of the District have a predilection for any special form of crime, most of the serious offences coming under the heads of theft and burglary. The -Gujars in the Bet do a good deal of cattle-lifting. The Gujars are from of old turbulent, and a large portion of them either actually engage in crime or are on the side of the criminals; but there are at present many respectable men of the tribe. The Rajputs do not go beyond grambling. The Harnis, Baurias and other professional criminal classes are not showing many signs of regeneration under our rule, and to their account a great deal of the crime of the District most be set down. Even with them the amount of orime is not more than normal, and the District will compare favourably with most in the province. There is a daily increasing love for litigation, which is most strongly developed amongst the Jats. The most petty cases are fought ont to the bitter end, and both parties freely use suborned witnesses to support their claims. The ordinary houest peasant appears quite to change his character when he comes into our Courts; but this is perhaps not to be mentioned as a feature peculiar to this District."

Honorary

A luminous note on the Tribal Law and Custom of the District Magistrates. will be found in Mr. Gordon Walker's Settlement Report, p. 287.

> There are four Honorary Magistrates in Ludhiana city and five in the rest of the District. The City Magistrates sit in

benches of two. Bench A sitting for the first half of the month and Bonch B for the second.(1)

For the jurisdiction powers, &c., of the Honorary Magistrates see Table 33 of Part B.

Land

There are 4 Barristers practising in Ludhiána besides 19 petition mi pleaders and 9 mulhtars. There are 93 petition-writers, of whom ters. 22 are first grade.

The Deputy Commissioner is ex-officio Registrar. Sub-Registration. Registrars are stationed at Jagraon and Samrala for those two Part B. Tahsils. The Sub-Registrar at Ludhiána is concerned with the whole of the Ludhiana Tahsil with the exception of 54 villages, chiefly in the Jangal tract, where Sirdár Badan Singh, C.S.I., performs the duties of Sub-Registrar. Besides the Sub-Registrars, each Tahsildar is ex-officio joint Sub-Registrar of his Tahsil.

Section C.—Land Revenue.

It is in many cases impossible to class a village satisfactorily villege comunder any one of the ordinary recognised forms of tenure. The munities and primary division of right between the main sub-divisions of the village often follows one form, while the interior distribution among several proprietors follows another form. Frequently the forms vary within different sub-divisions of the same village.

The kharpanch deserves mention as a growth of our system. He is a shaver who has acquired a reputation for eleverness and for walker, S. R., knowing law, and has probably sharpened his wits by hanging \$66. about our courts. Ho is invariably in opposition to the lambardars and to Government; but his advice is taken on all matters by individuals or by the whole community. Any one wishing to institute a case consults him, and ho is always ready to suggest to a sharer some cause of quarrel with his neighbour. The kharpanch is in fact the village mischief-maker, and everybody's business is his.

Eharpanch.

The following figures show the classification adopted by Mr. vill Gordon Walker at the recent Sottlement and that given in the Land Gard Revenue Report of 1900-1901. In the paragraphs which follow will Walker, S.R., be found his remarks upon the Settlement figures:

	LAST	SETTLE	HENT.	1900-1901,			
Tonure,	Villages.	Share- holders.	Acres.	Villages.	Share- holders.	Acres.	
Zəminddris hetd by individuals Zaminddri village communities Pattiddri ditto Dhiyachdra ditto Mixed or imporfect pattidari or bhayachdra.	5 22 9 47 818	5 880 545 7,428 88,347	1,627 7,857 4,513 65,640 812,166	} 49 } 862	1,070 123,127	15,568 875,007	
· verament waste { Ferests Other	:::	181	276 78	***	110	f1f	
Total	201	98,705	882,157	911	124,197	890,573	

¹⁾ Panjab Government Notification, No. 987, dated 28th October 1891.

Land Revenue.

tenures.

"These figures show the forms of village tenures in the District according to the accepted definition of the torms zamindári, bháyachára end pattidári. But little information as to the real constitution of the villages is to be derived from this clessification, if indeed it is not distinctly misleading. In the form of statement⁽¹⁾ I read that a bháyachára village is one 'm which possession is the measure of right in all lands,' but I believe that for right we ought to read liability; and that the distinction comes to be a mere question of the manner in which the assessment is distributed for the time being on shares. This makes a very material difference, for in numbers of villeges, elthough the shares have become obsoleto to this extent that they are not used for distributing the essessment, the village common land and the receipts from it are still divided according to them. Again, almost every village has got some area, however small, of common land, in the receipts of which the community participate, and this fact makes the tenure 'imperfect.'

"The purest form of the village community is that in which the proprietors are or keep up the fiction of being descended from a common ancestor, and of this type there are only a few villages in the District, belonging mostly to Raiputs. I have explained in § 50 the manner in which most of the Jut villages were founded by several families, which generally belonged to different gots or subdivisions. The land was in the first instance divided according to shares (called hal or plough) a number of these being assigned to each family according to strength. The hal differed according to locality, but was as much as it was estimated that a pair of oxen could plough. Under nativo rule revenue was realized in kind or by cash on the area of certain crops; but the people retained these customary shares and used them in the distribution of common receipts and in payment of fines, cesses, &c. The subject will be more fully discussed in the second part of this report; but I may state the result generally to be that under our rule, owing to improvements in the land. transfers, &c., the shares have been generally abandoned as a measure of liability for Government revenue, but retained as a measure of right in the village common property and of liability for casual demands (e.g., malba). The native States around (Patible, Jind, Nabha and Maler Kotla) have followed our example and substituted a cash demand for revenue taken in kind; but it is overywhere distributed on the shares (halsari). It is only in the Bet and in a very few Dhaia villages of this District that the people have of their own free will adhered to the shares under our rule. There is no village that I know of in which the land was originally occupied piccomeal without a formal division according to shares. The original distribution is generally most elaborate, the whole area having been divided into blocks eccording to quelity and each sharer getting his portion in each block. Sometimes the land of each subdivision is separate, and there is then this same arrangement amongst the sharers inside of it. I should say then that the villages were all pattidari (or zamindari) in their origin; but that in most the shares had fallen out of use for purposes of defining the liabilities of the sharers."

Subdivisions,

The subdivisions of villages are tarajs in some of the larger villages, pattis in most; and inside of these thulás. The proprietors of a thulá are generally of the same gét and often the descendants of a common ancestor. Each thulá will be found divided into ploughs (hal), which may be either pakka or kacheha, the former representing the original distribution of land, and the latter subsequent partition; but the size of the plough new merely depends on the number of sharers in the subdivision, and it may or may not be the same for the whole village. Thus the land of a village may be divided equally between two pattis, and subdivided inside one into 20 and inside the other into 25 ploughs.

⁽¹⁾ See also paras, 103 and 104 of the ! Directions to Schliement Officers, Barkley's Daition.

In most villages there are lands held by persons who are not members of the village community, who possess no share in the common lands, and who are called málikán qabza. Many of them hold small religious endowments only.

Mr. Gordon Walker thus discussed the average size of holdings:

"With the Assessment Reports I submitted statements showing the average size of the proprietary and cultivating holdings, but these, as I pointed out, are quite unreliable. The holdings were of the khatauni (register of tenancy ings. holdings), and calculations based on them are necessarily valueless. Thus A and B hold land separately, having divided it and also have some in common. § 42.

Table 38 of A has mortgaged a couple of fields to two other proprietors and B may have done the same. Each of these facts is shown as a soparato holding. Or, Part B. again, a proprietor cultivates his own land, and has also rented land from auothor; and he would appear both as a proprietor and as a tenant. I have now done my best to find out what the actual size of the holdings in the different talksils is. I have taken the total of all land cultivated by proprietors, whether it is their own or that of proprietors, and divided this by the total number of proprietors, whose names appear in the khewat. Only those are shown as tenants who do not own land. The result is as follows:-

		Кнет	randars.	OCCUPAN	CY TENANTA	Tenants-at-will,			
	Tabil	•		No.	Area cultivated.	No.	Area cultivated.	No.	Aren cultivated.
Samrálo Ludhiána Jagráon	***	***	;;;	22,617 61,308 20,608	198,300 331,490 211,500	1,050 3,003 1,655	4,160 11,582 11,352	2,388 6,200 1,491	6,816 21,447 6,750
	Total	**1	***	100,533	679,305	6,817	27,004	10,088	35,022

[&]quot;Thus the average area to every cultivating proprietor, who is liable for Government revenue is, for the whole District, 6 acres. In Jagraon Talisil it is 8 acres, and in the Jangal Circle of Ludhiana, 9 or 10. Every khewatdur is not necessarily the head of a family, for he may be unmarried; but he is in every case an owner of land in his own right."

In 1901-02 the figures were-total area cultivated 767,285; total number of owners 476,987; tenants free of ront 4,852; cccuvancy tenants 31,807; tenants-at-will 251,024.

Petty village grants made to village menials and others Petty village assume various forms. The most common is a revonue-free grant, but this is by no means the only form. Sometimes the land is leased to the grantee at a favourable rent, or on condition of payment of revenue only; sometimes the owner cultivates and pays the revenue making over the produce to the grantee; while occasionally the grant consists of the rights of property in the land, which, subject to the usual incidents, such as responsibility for revenue and the like, vest in the person performing certain specified services at such time and for so long as ho performs them. These grants are most commonly made to village monials and watchmen on condition of, or in payment for, services rendered to attendants at temples, mosques, shrines, or village rest-houses so long as they perform

CRAP. III, C. Land Revenue.

Gordon

CHAP. III. C. the duties of the post, and for maintenance of monasteries, hely men, teachers at religious schools, and the like.

Akhars'

Land Revenue.

In every village there is a common fund (malba) managed by the lambardárs. There were formerly various sources from which money came into this-

Commou village property:income ture : village

- (1). Receipts from sale of produce of the common land, and rents paid and expendi for cultivation of it.
- Cosses. (2). Atraft, or a cess levied on the houses of the artizans and sometimes Gordon of the shopkeepers, at the rate generally of Re. 1 per annum on each shop or Walker, S. R., house.
 - (3). Dharat or tulái. Whenever grain was sold in the village it was weighed by the tola who charged at a certain rate on each transaction, and credited a portion of these receipts to the village fund.
 - (4). There has always been a good deal of expenditure from the common fund, principally on feeding fagirs and other holy men; and, as this generally exceeds the receipts, a collection has to be made from the sharers. The second and third sources of income have survived in only a few villages; and with the spread of cultivation the first does not remain in many. In the eastern villages the funds are invariably raised in the following way. The lambardars have the power of incurring expenditure as necessary, getting the money from some appointed shop, and the account is made up once or twice a year, the sharers being entitled to have it explained to them. The amount spent is then collected by a bachl or contribution from the sharers. In some villages the proprietors have allowed the lumbardars to realize a small percentage on the land revenue for this purpose, and the latter are then responsible for the whole expenditure. In a few villages to the west (Jagraion and Pakhowal) atrafi is still realized; but the proprietors generally prefer to divide the receipts, keeping the public account separate in the manner described above. When considerable sums are now and again realized by the sale of wood on the common land, this same course is followed. In the Jangal villages, the whole village expenses are paid by dharat, or fees on sales of grain, the transactions in those parts being much more considerable than in the eastern villages. Disputes about the village fund are constant, and the endeavour is everywhere to deprive the lambardars of the power to spend money for any purpose. The sharers are usually put up by some knowing one to question this right, and the management of the common fund becomes a standing cause of quarrel.

EARLY SETPLEMENTS.

Akbar's re-Walker, S. R., ₫ 183.

In the A'in-i-Akbari(1) we have under the head of "Tribute and Taxes" teams system a complete account of the great emperor's revenue system, and some reference to those that had preceded it. The ministers, Todar Mal and Muzaffar Khán, between the 16th and 24th years of the glorious reign elaborated a schemo for fixing the land revenue of the empire, and for giving security to the husbandman, which is nearly as complete as our own. One standard chain and bigah were first introduced; then land was classified into poolej or cultivated every harvest, and perowly, chechar, banjer (Gladwin's spelling), fallow and arable waste. The average produce of each crop was then struck from the estimated value of the yield of three classes of poole; or regularly cultivated land; and of this one-third was taken as the Government due, all extra cesses being at the same time stopped, and salaries to be paid in cash from the imperial treasury being fixed for the officials, who had before that lived on the people. From

the 25th year of the reign a ten-years' settlement was introduced, the value of the Government share in each erop being taken at the average of the preceding ten years. Elaborate instructions were at the same time formulated for the guidance of the collectors (Amilgurars) and subordinato agency. The assessment was apparently a fluctuating one, the rates on crops being fixed for the period; but the people were ullowed to pay in kind if they chose. The rates reme system were uniform subas or provinces; and no special information is to be obtained (1656-1605). about this District in particular, as it is made up of several of the 33 mahals of the Sirhind sarkir or division, of which the whole land revenue is set down at Rs. 40,00,000 (16,07,90,510 dams). Tables are given in the A'in of the rates collected on every crop during a period of 19 years from a bigah of poolej or cultivated land in each suba. Wheat paid generally from Rs. 1 to 2 a ligal; gram, &c., from 8 annas to Re. 1; penda sugarcane from Its. 4-8 to 5; other cane from its. 2 to 3; cotton from its. 1-S to 3; pulses and millets (moth, mung, joicer, &c.), from 4 annas to Re. 1. It was not to be expected that any more particular information as to the assessments paul by villages or tracts \$00 years ugo would be forthcoming; and, as the country was but partually under cultivation, and the pre-cut villages did not then exist at all or their limits have much changed since then, it would scarcely be of much uso even if available. The rates fixed are, however, interesting.

Land Revenue.

Akbar's re-

It is impossible to say to what extent the system of Akbar was miniatained by his successors; but the administration of the revenue must have suffered in management the general disorganization of the government under the later emperors; and later empire in all parts it came to be a struggle between the collectors and the payers of revenue, the former trying to take as much, and the latter to give as little as Walter, S. R., they could. The custom of leasing a large tract of outlying territory to some person of importance, who paid a fixed rum annually, and made his own arrangement for collection (mustajir or samindar) must have been recognized even in Albar's time, for the western mahals of the District were always held by the Rais on these terms. The Philkian and Muler Kotla chiefs, too, were originally lessees, and held their territories subject to the payment of what was really an unnual tribute. The mustajir was liable to pay the sum so fixed, but was otherwise independent; and it was only when he withheld payment that the imperial authorities interfered.

Gordon

The mustajir, if his circle of villages was small, took a share of the produce from the cultivator, or sometimes eash rents on particular crops; but generally, as he held a large tract, he sublet it in smaller circles to others who dealt direct with the enlivators. The eastern parts of the District were at lirst directly managed by the governor of Sirhind, because they were within easy reach, and an assesment was fixed year by year for each village; but, as the imperial authority weakened, and collections became more difficult, the system of leasing tappar or circles of villages spread. The principal anadigir or assigned in this District was the Rui of Raikot. The family began with a few villages, but gradually extended their boundaries, undertaking the revenue management [called kattana] of outlying circles of villages as the governor of Sirland lost control of them; till family they held more than half of this, and a good part of the Ferozepore District. The Malandh Sardárs, like others of the Phulkian stock, had also a lease, and paid tribute to the emperor, taking a share of the produce from the husbandmen. There were other mustafire of less note, such as the Garawal Chandhris of Raipur and Gujarwal, who had a small circle of villages, and paid revenue direct into the imperial treasury. The ability to realize the revenue has always been the test of power in this country; and we find that, as the imperial authority grew weaker, the mustajirs were less regular in their payments; while the villages directly assessed would only pay when forced to. As an illustration the following

CHAP. Land Revenus.

Ravanna

management

under the later empire. incidents that took place about 1740 A.D. may be recounted. The Rai (Kalha) was not paying up his revenue regularly, ond informed the suba or governor of Sirhind that he could not realize from the villoges. This was reported at Delhi, and Ali Muhammad Rohilla was sent to bring the people to order. He marched out of Ludhiana towards Jagraon, putting to death lambardars here and there by way of example; but he soon found that it was the Rai himself who had created the difficulty and incited the people to withhold payments. Ali Muhammad then turned on the Rai, and, with the assistance of the Phulkians, chased him out of the country.

Revenue management under the Sikhe, Gordon Walker, S. R.

An account of the manner in which the country was partitioned on the disruption of the empire and the fall of Sirhind (A.D. 1763) has already been given. The western portions of the District were already in the possession of the Rais and of the Malaudh Sardárs, who between them held the greater part of the Ludhiána and Jagráon Tahsils; while Samrála and some of the western villages of Ludhiána, which had hitherto been under the direct revenue monagement of the governor of Sirhind, were seized on in groups by a number of petty Sikh chiefs from across the Sutlej. The only difference that the change made to the Rais and to the Malaudh Sardárs was that they ceased to pay tribute! The petty chiefs from the Manjha brought with them their system, if such it may be called, of revenue; and when in 1806-09 A.D., Maharaja Ranjit Singh extended his territories to this side of the river, annexing all the country held by the Rais, and absorbing several of the petty chiefs, this may be said to have been introduced all over the District. Ranjit Singh divided his conquests between himself and the Kapurthala, Ladwa, Nabha and Jind chiefs in the manner described in Section B, Ch. I, p. 21. The greater part was either retained by himself or given to the first of these. The expression system of revenue has been used above, but it may be said of the Sikhs as rulers, whether in the Punjab proper or in the Malwa, that their system was to exact as much from the cultivator as was possible without making him throw up his land. No one will claim for Ranjit Singh the reputation of a mild and benevolent ruler. On the contrary the careless manner in which he leased out tracts of country along with the revenue payers inhabiting them to the man who was willing to give most, or to some worthless court favourite, showed that he had a complete disregard for the welfare of his subjects. It was only when by some happy chance a really enlightened ruler of the stamp of Sawan Mal was entrusted with the government of a portion of his conquests that any consideration was shown for the people. The chiefs, great and small, pursued the same object as the Maharaja, i.e., to get what they could out of the peasantry; and the only restraining influence was the fear of losing the revenue-payers. Land was then plentiful and cultivators scarce, so that there was the danger of a chief driving away his villagers into the territories of a neighbour who was not quite so bod. In effect the chiefs were landlords who exacted from their tenants the utmost that they could without driving them away. There was a strong feeling on the part of the peosantry that they had o right to cultivate the land, and it was only the most extreme tyrauny that would separate them from it; but on the other hand the demands of the chief on the produce were limited solely by his own discretion.

§ 186.

Maharaja Ranjit Singh leased the territory reserved for himself in circles Walter, S. R., of villages, the lessees being changed from time to time. Thus the family of the vakils held the pargana of Sahnewal, paying Rs. 1,00,000 per annum for it; and Jamadar Khushal Singh held about 150 villages in different places. These lessees made their own arrangements with the villages year by year generally taking care to leave a margiu of about one-fourth as profit on what they raid into the Lahore treasury. For some villages a cash

cash revenue according to certain rates for the Kharif crops. They were really "Zamindars" in the Bengal sense of the word and will still assert that the land of the two or three villages that they held belonged to them,

demand was fixed, in others a share of the produce was taken or the oash value of the Government share was determined by appraisement. The Kapurthala (Ahluwalia) chief had a large tract of country on this side of the river, nearly the whole of the Jagraen Tahsil: and the method of fixing the assessment in his possession may be taken as a sample and appears to have been as follows. The Tahsildar went from village to village every year, and firs made an offer to the lambardars of the assessment at a certain sum for tha year (this method being known as mushakhasal. This was often accepted; bu if not, a valuation of the Government share of the produce for the year wa made by a committee selected from the respectable lambardars of the neigh bourhood. For the Rabi harvest an appraisement (kan) of the value of the yield from each field was made whon the crop was ripe; and for the Kharif fixed cash rates were generally applied. The resulting assessment for the year was seldom exacted in full, notwithstanding the free use of the various recognized methods of torture; and large balances were generally allowed to accruo. The lesser Sikh cluefs took a share of the produce in the Rabi, and

e	Land
0	Revenue.
n	Revenue
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Стор,				Rato per aero.				
Cano Maise, cotton Charri, meth, &c. Carrots and other poppy, &c.	Tegeta	bles,	Rs. 14 7 1 5		to to	Hs. 20 10 3 fixed	0 0 4	

The rates paid by the cultivators on the zabti crops were as shown in the margin. These rates were fixed for a kachcha bigah or ghumas, which varied a good deal throughout the District, each chief having his own standard. The kachcha bigah has been taken at one-third of the Government standard, as this was about the average.

The rate at which the chief realized his share of the produce was generally one-third of the grain and one-fourth of the straw. The share of the grain was often fixed as high as half. The Ruis are said to have only taken one-fourth grain, and their rule is still spoken of with regret. One would have thought that with rates fixed so high the peasant would have little left for his maintenance; but besides the regular revenue there were the usual dues in cash or in kind, paid to the chief or to the harpies who represented him in his dealings with the people. It was impossible that the cultivator should pay out of his produce all that he was supposed to; and his main resource was pilforing from the field or grain heap before division. The saying batais lutais applied with equal effect to both parties. There were about a dozen dues levied in eash under some absurd protence or other; and, if we add to this that the chief quartered his men and horses on the villagers, and that the latter had to contribute their labour gratis whenever called upon to do so, we may imagino that the lot of the husbandman was not a happy one, and that ho could scarcely call his life his own. It will require a training for several generations to offace the results of a system like this, and to convince the people that such a thing as honesty is possible in the relation between Government and the revenue-payers.

In 1835 we acquired in the manner described in Chapter I, B, p. 22, a small liement portion of territory round Ludhiana and Bassian, in all 74 villages. These villages that were managed in much the same way as the surrounding native territory for lepsed four years; then a summary cash assessment was fixed for three years; and finally in 1842 a Sottlement was made for twenty years, apparently by the Walker, S.S., assistant political officers, Captain Mills, Messra. Vansittert and Edgeworth. § 187.

LUDHIANA DISTRICT.

CHAP. III, C. Land Revenue.

British Settlement of lapsed in

There is no English report of this Settlement, which was probably more or less of a regular one on the model of those of the North-West Provinces; and from § 71 of Mr. Davidson's report (written in 1853) it appears that none was submitted. A complete vernacular record with maps was made out; but this was revised when the rest of the District came under Settlement in 1850, and the assessments of 1842 were at the same time reduced where villages that necessary, enhancements being deferred till the expiry of the full term of the original Settlement. Seventy-one villages, which had paid Rs. 75,680 in 1842, had their assessment reduced to Rs. 74,893. Three villages were not assessed in 1842, because held revenue-free. It will be seen from this that the assessment of 1842 differs but slightly from that fixed after revision.

Summary assesments, 1847-1849. Gordon. Walker, S. R., § 188,

1885.

The rest of the District came into our hands after the Sntlej campaign of 1845-46, and a summary assessment was fixed by the first Deputy Commissioner, Captain Larkins, who held charge from 1846 to 1849, Sir G. Campbell, who succeeded him, completing such work as remained to be done. The only guide for the assessing officer was the amount collected from each village by our predecessors; and this was ascertained, so far as possible, for a period of five years from the old papers, statements of leading men, &c. A very liberal deduction was made from the results arrived at in favour of the people, the amount of this varying from three to six annas in the rupee. The jágir villages were excluded from these operations, and the jágirdárs were allowed to continue their collections as before, till after the annexation of the Punjab in 1849, when it was decided that a cash demand should be offered to all villages alike. The assessments of the Summary Settlement were accepted readily; and, considering the data on which they were founded, worked wonderfully. A few villages became disorganized, probably owing to the change of system, and reductions had to be made here and there; but the people welcomed a fixed demand, and this need not excite our surprise when we think of what they had borne under our predecessors. It is usual to contrast the elasticity of native systems of revenue with the rigidity of ours; but it was the complete want of fixity that made the Sikh system a curse to the country. The best way of forming an idea of the fairness of the snmmary

	Acteur	nt.	
Taneir.	Summary or by jagirdars' esti- mate.	Regular.	Decrease per cent.
Pakhowál	2,88,141	2,55,959	11
Jagráon Ludhiána	1,74,334 2,46,786	1,68,883 2,42,150	8 2
Samrála	2,36,388	2,59,108	20
Total	10,45,599	9,25,600	11

assessment as a whole is to observe the extent to which it was necessary a few years after to revise it in the Regular The marginal Settlement. figures are taken from Mr. Barnes' review of the Regular Settlement, Appendix which shows the final result after he had made some alterations in Mr. Davidson's new

assessments. As noticed above, the jagir villages were excluded from the summary assessment, and this statement includes the jagirdars' estimate of their previous collections.

The Regular Gordon Walker, S. R., § 189,

The Regular Settlement operations commenced in 1850; and the assess-Settlement of ments were announced between that and 1853. They were framed under the regulations of the time and the instructions of the North-Western Provinces Board of Revenue, embodied in the "Directions to Settlement Officers." The edition of this work then in force lays down the rule "that the Government should not demand more than two-thirds of what may be expected to be the net produce to the proprietor during the term of Settlement, leaving to the proprietor one-third as his profits and to cover the cost of collection." In \$9 40 and 41 of his report, Mr. Davidson has given an account

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Land Revenue.

The Regular

of how his calculations were worked out. There was a very elaborate classification of soils, each Tahsil was considered by parganas (of which there were 19), and the villages of each pargana were divided into three classes according to quality. In each class of villages the rent for every crop and soil was calculated; in the case of the Kharif cash rents (zabli), which were actually in use for the principal crops and had been taken by our predecessors, Settlement of giving the necessary data. For crops on which the rent was ordinarily taken 1850. in kind a rate of yield as ascertained from experiment and inquiry was assumed, the proprietor's share calculated at the prevailing rate of rent in kind, and the value of this worked out at the average of the prices current for ten years. The rental of each village was the total of the rents of each crop and soil. For the Kharif harvest the rental calculated was very little out, if at all. The rates assumed do not vary much from pargana to pargana, and there were the old Sikh zabti rates to go on besides existing cash rates of rent; the estimates of yield are much less reliable. As a rule the irrigated rates are much too low; and, although the cultivation may have improved, it cannot have done so to the extent that a comparison of the papers of the revised and those of the Regular Sottlement would indicate. As to the proportion of the gross produce taken to represent the proprietor's share, part of 9 of the Chief Commissioner's review of the Report ("the equitableness of the rate, &c.") appears to have been written under a misapprehension, and indeed is scarcely intelligible. The rate adopted as proprietor's share was one-third of the gross produce in the uplands and two fifths in the Bet; and of this rental two-thirds was taken as the share of Government, that is, as the revenue rate jama. Mention of the prices current used in the estimates of Regular Settlement will be found elsewhere, but it may be stated here that the prices fixed, though warranted by the information then at the disposal of the Settlement Officer, were too high for the following ten years (1850-50), which was a period of very low prices.

Gordon

The inquiries made at the revision of Settlement showed that the weak point of these calculations of the rental was the produce estimate, the Walker, S. R., rates of yield not being carefully determined; but even with this the rentals \$150. were very near the truth in most cases. From them a deduction was next made in favour of the proprietor. Under the instructions quoted above this would be one-third; but in § 43 Mr. Davidson says that he adhered to no abstract rule, but adjusted his demand to that "prevailing in the pargana," which would be the summary jama. The balance, after making this reduction from the rental, was the revenue rate assessment. Having got his revenue rate assessment for each village the Settlement Officer used it as a guide in assessing, but did not adhere to it at all closely, the total of his actual assessments being considerably below it and only 58 per cent. of his estimated

In §§ 9 to 31 of his review Mr. Barnes gives an account of Mr. General cha-Davidsou's assessments for each Talisil (there were then four). Those of racter of the Pakhowal Tahsil Mr. Barnes considered moderate, and few complaints were assessments. made to him. Pakhowal comprised the lower part of the present Ludhiana Walker, S. R., Tahsil, with the Akalgarh and Bassian pargana of Jagraon. The Malaudh 5 191. jágir had not been before assessed. The details given in the review for this pargana show that in khalsa villages the summary assessment of Rs. 1,67,647 was raised to Rs. 1,79,425; while in the jagir villages a nominal summary assectment, which had been estimated at Rs. 1,15,988, was reduced to Rs. 745 .

The treatment of the Jagraon Tahsil was considered to be not successful, and numerous complaints were made. The assessments of the Hatur pargana were reduced by 14 per cent.; and relief was also given in Jagraon pargana.

CHAP. Land Revenue.

The figures for the whole tahsil as given in the review are shown in the mar-Summary assessment
Mr. Davidson's assessments , 1,72,282 himself very doubtful as to whether the
As reduced by Mr. Barnes , 1,68,383 Settlement would stand. At the present time the Hatúr and Jagráon parganas are undoubtedly in a more prosperous conracter of the dition than any other part of the District, except perhaps the Jangal villages; and it is hard to realise the "appearance of squalor and poverty" to which Mr. Barnes refers. The explanation seems to be that these pargands, which lie on the Ferozepore border, have always been dependent on a comparatively light rainfall, the proportion of irrigation being at present about 5 per cent. There had been two or three bad years when Mr. Barnes saw the tract in 1855, and the prices of the inferior grains (mixed gram and wheat, or gram and barley mostly) were very low. Be this as it may, the forebodings of the review have not been realized.

> The Settlement of the Ludhiana Tahsil was considered to be better than that of Jagraon, and there was little or no complaint. The new demand was a reduction from Rs. 2,46,787 to Rs. 2,42,704, or of one per cent.

> Samrála Tahsil Mr. Barnes considered to have been before "grievously over-assessed." The nominal reduction given by Mr. Davidson from the Summary Settlement jama was from Rs. 3,43,509 to Rs. 2,62,582, or 23 per cent. If we exclude the jagirdars' estimates the reduction was about 20 per cent. Few complaints were made about the Regular Settlement assessment.

> It is evident from what Mr. Barnes writes that two or three years after the new assessments had been announced they were subjected to a searching scrutiny; and such defects as appeared were at once remedied. The Commissioner visited every part of the District, and freely exercised his power of revision; and no man of his day had greater knowledge of the work of assessing than Mr. Barnes. The total of the reduction given outside of the Jagráon Tahsil was inconsiderable.

The term of € 192.

The period for which the Regular Settlement was sanctioned formed the the tegralar subject of some correspondence in 1879; and the circumstances connected with this are mentioned so as to prevent future misunderstandings. The term Walker, S. R., of the Regular Settlement of 1842 was 20 years. Mr. Davidson's assessments were introduced between 1850-53 and the tenders were taken for 30 years, either from the date on which they were written, or when in the case of the villages settled in 1842 enhancement was proposed, from 1862, i.e., after the expiry of the original period of 20 years. In § 23 of the letter (No. 686, dated 11th Angust 1856, printed with the Regular Settlement Report) in which the orders of Government on the settlement were conveyed to the Financial Commissioner, the sanction is said to be "for the period of 30 years, i.e., up to A. D. 1880." But the orders of Government were lost sight of probably in the confusion resulting from the mutiny; and the tenders of engagement remained unaltered and show the periods as not expiring till 1892 and 1893 in the case of some villages. It was held in 1879, on a reference to Government, that the period of Settlement for the whole District should be taken as expiring in 1880, and that this should be notified to the people.

Working of

§ 193,

There was only one refusal to engage for the Regular Settlement assessthe Regular ment, the village of Bairsal in Jagraon being leased for 10 or 12 years. In Settlement, a few villages proprictary rights were transferred on account of refusal to Walker, S.R., engage in 1842, or for balances found to be due in 1847, but it does not appear that any difficulties followed the introduction of the Regular Settlement assessment of 1850. In only one village has the assessment been reduced since the revisions of Mr. Barnes. Notwithstanding that the assessment was severely tried by two periods of scarcity, the officers who have held charge of

the District since all bear testimeny to the fact that the assessment was light and fairly distributed. No coercive measures have been resorted to. The balances due to suspensions in the years of scarcity were insignificant (less than one per cent of the demand), and were quickly realized. There has been little difficulty in collection anywhere, except in some parts of the Bet, and it may be said that any apparent slackness is due, not to inability to pay, but to a the Regular hereditary navillinguess to do so. This element will be appreciated if we Settlement. compare our mild methods of getting in the revenue with those employed by our predecessors. A lambardar, who has probably had experience of the latter, is not likely to care much for the issue of a warrant. In the Muhammadan Bet (Rajput and Gujar) villages there is generally a scarcity of eash, and the revenue has systematically to be borrowed, but this would still be the case if we were to reduce it by half.

CHAP. Land Revenue.

Working of

THE RESISED SETTLEMENT.

In 1879 Mr. T. Gordon Walker began the revision of the revenue In 1879 Mr. T. Gordon Watter negan the revision of the revenue of Regular settlement, which he completed in 1883. It is report will be found to contain Settlement, the fullest possible detail; and the following pages, which are taken from it 1879.83. almost without alteration, touch upon the most important features and tho general results of the revision. The general considerations upon which the new assessment was mainly based were the increase or decrease of cultivation, and of the means of production, the ulterations in the price of agricultural produce and the general improvements in resources and condition of the tract under the expiring settlement.

Revenue

The marginal figures from the statement in § 6 of Mr. Davidson's report Increase of

Darren Date. Total area Cultivated, Culturable waste, 1850 Regular Settlement 575,DCS 606,500 133,069 100 70 1880, Revised Betiloment CC.401 892,167 729,000 £6,664 100 83 1901. 70,841 600,553 767.293 100 86

of the First Regular cultivation Settlement show the Walter, S. K. area at that time still \$ 198. available for cultivation, and beneath are added the proportions us shown by tho papers of the new survey and the most recent figures available.

" Exclusive of 197 acres of forest.

The increase in cultivation worked out for the whole District at nearly 8 per cont.; and 91 per cent. Eamráia & per cent. of arable waste was returned at the Revised Settlement. The increase was Ludblina ... 10 distributed over the three tabsils as given in the margin, the percentage being highest in the Parvidh and Jaugal assessment circles of Ludhina Tahsil and in Jagrion. Notwithstanding the figures, there is little room now for further extension, and the margin left at the Regular Settlement has since been filled up. Nearly onethird of the culturable land of our returns is in the Bet, where it is more difficult than elsewhere to say of much of the waste that it is or is not capable of producing a crop that would repay the cost of cultivation. In the Dhain the culturable causi is of areas left for grazing, which are of considerable extent in some of the outlying

CHAP III, C. Land

and western villages, but generally very small patches, just enough for the cattle to stand in.

Revenue-Increase of irrigation,

The only other way in which the productive power of the land had been increased was by the addition of the means of irrigation. The following statement of irrigation and of masonry wells shows the extent of this in each Tahsil:-

	Sanrala.		Ledu	iana.	Jage	MAON.	Total.		
Tahsil.	Area irri- geted.	Namber of wells.	Area irri- gated.	Number of wells.	Area irri- gated,	Number of wells.	Area irri- gated.	Number of wells,	
Hegular Settlement Revised Settlement, 1901-02	44,653 40,645 57,458	2,756	43,979 40,599 69,055	3,840		1,955	102,641 109,895 138,523	7,957	

The increase in the area irrigated was 7 per cent., and in the number of wells 16 per cent.; but most of the new wells were small ones sunk in the low lands under Ludhiana. From this it will be seen that, even if it were allowable to tax to the full improvements due to the sinking of new wells, the enhancement on this account would be a small item; and the Settlement Officer dealt vory loniently in his assessments with irrigated land, besides taking care that the constructors of new works should onjoy the full period of protection allowed to them by the orders of Government.

Prices Walker, S. R., § 199.

At Appendix XII to the Settlement Report will be found a note on the Gordon subject of the rise in the prices of agricultural produce, together with a table showing the variations during the 40 years, 1840-79. The inquiries extended over this period, or to about 10 years before the previous assessment, was fixed. The following statement shows the increase of the prices realized by agriculturist for the principal products during the 20 years, 1860-79, over those of the period, 1840-59, preceding it:-

	Wheat.	Gram.	Barley.	Gur.	Uool eaned	Maize.	Moth (pulse).	Jourdr. (millet).	Rath (cane juice).
Average of 1640-59 Average of 1860-79	 100 158	1(0 148	100 165	100	100 164	100 162	100 153	100 221	100 131

Briefly stated, the history of the fluctuations is as follows. The Regular Settlement assessment was based on the prices of the few years preceding 1850, which were high; and its introduction was followed by a general fall. Prices continued very low till 1861, when famine sent them up; and thoy did not sink again to their old level. The scarcity of 1868-69, and the completion of the Sind, Paujab and Delhi Railway through the District in 1870, which opened the local market to the demands of the whole of India and its seaports, together with the general progress of the country, finally established prices at their present level; and it is not probable that they will ever again recede. During the 20 years before 1883 they were on the whole stationary; and, although this period includes four seasons of high prices (1862 and 1868, and the two years 1878 and 1879), this is not an abnormal number, nor is the actual average unreliable. The above statement shows that the average of the prices realized during the 20 years, 1860-79, by the agriculturists for the ordinary staples of produce were 50 per cent, or upwards in excess of those of the previous 20 years.

For the fluctuations in prices since Settlement see Table 26 of Part-B.

The division into assessment circles mule at the Regular Settlement Gircles, did not follow any rational principle; and the supposed necessity for adhering to the old pargana divisions made it practically useless. At the Revised Woller, S. R. Settlement Mr. Gordon Walker adopted in each Tabell the natural features of § 202. the country as the basis of his arrangement, of The villages of the low-lying Bet tract were first separated off. The Ludhiana Bet was rather too extensive for convenience, and, as there is a great difference in the produce of the upper and of the lower partions of it, a saledivision was necessary; while of the former it was necessary to throw into a separate class those villages which have land subject to unoual inaudation (mand or kachha), us the uren is of greater extent here than elsewhere along the river, and differs widely from that part which is removed from the river (pakka). In the next place the villages in the strip of sandy soil along the Dha or ridge over the Bet could not come into the same class as those further inland, and were placed in a circle by themselves. In Samrila and Jagraion the remainder of the Tabell was of so uniform a character that there was no necessity for sub-dividing it further. The uplands of Ludhiams, however, stretch much further south than those of the other tabilis, and there is considerable abversity in the natural features. The outlying Jougal villages, with a small minfall and go irrigation, naturally fell into a group by themselves; and as to the remaining portions there is so much difference between the south-western corner about Pakhowal and the rich tract round Makadh, that the separation of these was necessary; and there was left the upper portion, corresponding to that of the other Tubsils.

The low lands in the valley of the Satlej are everywhere known as Bet, while the land exposed to the direct action of the river is called kachha or mand. The uphands are generally spoken of as Dháia or hand beyond that high bank (dla). The tract immediately over the Het has been called Lower Dhaia, and that beyond it Upper, although the words lorer and apper are not perhaps very appropriate. In Ladhiana Tahsil the terms Jungal und Pawadh have been upplied to the outlying villages and to the rich country about Mulandh respectively, while the tract runnil. Fukhowal has been termed Tibára, or intermediato between them. The names Lower and Upper Dháin have been carried into the Jagaion Tabell for the sake of convenience. Tho assessment circles then are in Jagraion and Samrila, Het, Lower Dhain and Upper Dhain; and in Ludhiana three Bet virgles, one of which is known us kashha and another as pakka, the Upper and Lower Dhain, and the Pawadh, Tiliára and Jangal circles.

The Samrila Bet Circle contains 68 villages with a total area of 26,773 neres, of which 10,175 acres, or 60 per cent, are cultivated, 4,514 or 17 per by Tahafta cent. culturable or recently thrown out of cultivation, and 6,087 or 23 per and Gircles: Samrala het. cont. unculturable. It consists in the first place of the hand (called mand) icomediately adjoining the Sutlej and liable to annual intendation. The Walter, S. R., deposit left by the river is very fertilizing, and a rich clay soil is formed, but in \$ 210. places this is shallow and the under stratum of sand is soon reached. Beyond the mand the land is higher and the soil of more uncient formation and deeper (generally 3 or 4 feet). Water is near the surface, and there is seldom lack of anisture, so that artificial irrigation is not wanted. The soil of this

CHAP. III. C. Land Revenue.

Prices.

Arsorment Gordon

Assessments

⁽¹⁾ It must be comembered that the division of the District lute assessment circles was made before the Sichlard Canal was opened. For an account of the canal and the extent to which It has affected the District see pp.

Land Revenue.

the Pakka Bet is generally a rich dark clay, very fertile, but requiring a great deal of tillage. In places there are sand drifts left by the river, but these are rare. Under the high bank runs the Budha Nala in the old bed of the Sutlej. The land to the south of the Budha, between it and the high bank, is generally very good, as it rises away from the former, and the soil has a mixture of Assessments sand from the Dhaia. On the other side of the stream there is a strip of land by Tabells and Oroles: Sam. rendered permanently barron by the proximity of the water, or actually swamped.

Gordon Walker, S. R., § 221.

rála Bet.

Of the whole area 60 per cent. is in the hands of Muhammadan Jats, 28 of Muhammadan Rajputs, and 5 of Gujars : and it is much the worst feature of this circle that 88 per cent. of the land is held by the most improvident classes. Of the cultivated area 3,490, or 21 per cent., is held by tenants-atwill, and 1,336, or 8 per cent., by tenants with occupancy right, or in all 80 per cent. of the cultivation is by tenants. The tenants belong for the most part to the same classes of the proprietors. The returns show that between the Regular and the Revised Settlements 2 per cent. of the whole land was sold, and that nearly 8 per cent. was in 1883 in mortgage with possession to the mortgagee. The percentages on cultivation were three sold and twelve mortgaged; and it is probable that only cultivated or culturable land was transferred. The average price of the land sold was Rs. 34 an acre; and the amount secured on mortgage Rs. 38. The land transferred has gone almost entirely into the hands of strangers. Thus on the whole nearly 10 per cent. of the total, or 15 per cent, of the cultivated area, has been transferred since the Regular Settlement, and most of it to the money-lending classes. These statistics are far from showing the whole indebtedness of the people. There are a few villages able to hold their own; but they are a small proportion of the whole. Some have gone entirely into the hands of the money-lenders, the land having been sold, or being held in mortgage for such an amount that, there is no chance of it ever being redeemed. There are colonies of bankers (Súds, Khatris, Banias) in Máchhiwárá and Bahlolpur who live entirely by lending to the Bet cultivators; and many of these classes have established themselves in the villages (Panjgirain, Sherpur, &c.). The amount of money owed on book debts is enormous. It has been totalled up in some villages and found to amount to Rs. 10 or 15 an acre. The villages are all small, averaging about 400 acres total area, and many are on the money-lenders' books for Rs. 5,000 or upwards. There can be no doubt that the tract was at . the Revised Settlement in a bad way; and that a large proportion of the land was passing out of the hands of the old proprietors into those of the money lending class. There were many causes at work to produce this result.

Owing to the high rate at which rents in kind are paid, it was recognized that the assessment must, in the very depressed condition of the tract, be much under the produce estimate. The marginal statement shows the reveune rates finally adopted and their result. The calculated increase by these rates was

Solt.	Area in acres.	Revenue rate.	Resulting Jama,	Produce .	Former essessment,
		Rs. As.	Rs.	Rs.	Rs.
Irrigated Dofaeli Ekfaeli	10,897	4 0 2 10 1 8	1,172 28,604 7,492	1,493 35,305 8,906	114 110 110
Total :	16,185	2 4	87,268	45,701	82,503

4,765, or 13 per cent.; but, owing to the necessity of assessing lightly alluvial n e w lands, it was expected that the village assess* ments would fall short of the sum. The assessments, former and new, (1]. Demnud for 1880-81 ...

and the result of the rates were as shown in the margin. The actual en-

linneement was Rs. 3,829, or 12 per cent. This increase is a small one, and it was on the

Land Revenue.

32,234 38,468 whole distributed evenly over Assessments (2). Assessment by the sanctioned rates (3). Actually announced ... 27,063 the villages. It is not likely to by Tahelisand make much difference in the condition of the tract; and, if regard be had to Oircles: Samthe productive power of the land, the new assessment is moderate, for the tract rain Bet. is a very fertile one. The greater part of the proprietors, and cortainly all the

Mahammadan Rájpúts, are hopelessly involved in debt, and the only measure

Rs.

that could do them any good would be the suspension of the action of the ordinary Civil Courts.

The Lower Dhain Circle consists of certain Dhain villages whose lands extend into the Bet also, and therefore includes a certain area of Bet as well as Lower Dhiia The total area is 31,482 acres (contained in 30 villages), of which 25,035, or 79 per cent., are cultivated, 2,461 culturable or lately ubandoned, Walker, B.R., 2,514 unculturable waste, and 1,472 Government property (land under the \$226. canal and roads). The Bet portion of the circle is for the most part very fertile, the land sloping down to the Budha Nala, where this stream is at a little distance from the high bank. The soil is generally lighter than that of the rest of the Bet, there being a mixture of sand from the Dhain with it, and produces without irrigation splendid crops of sugarcano and cotton. There is also some good irrigated cultivation. But to the east, about Ponwat and Bahlolpur, the Budha is close under the high bank, and there is a great deal of swamp, the land being all to the north of the stream. The Dhain proper is a tract with an nueven surface and a light sandy soil, which shifts about under a strong wind, and is blown into hillocks. Ordinarily it has the appearance of a desert; but the soil is very retentive of moisture, and under favourable circumstances good crops are grown. The Kharif crop is mostly moth, for the growth of which the soil is adapted. With a light rainfall, when better land will bear nothing, fair Rabi crops of wheat, or wheat and gram, nre grown ; but they are liable to be buried under the shifting sand. A henvy rainfall, such as suits soils with more clay in them, is bad for this. Round the villages are the wells, and the land attached to them is generally superior and highly cultivated; but there is a continual struggle to keep out the drifting sand. For this purpose trees (the ber generally) are planted or hedges put up as barriers. The worst villages are these adjoining the high bank. The surface in them is very hillocky, and the soil therefore more liable to shift. The villages adjoining the Upper Dhaia Circle have generally a more level surface; and, though the soil is poor, the crop is not so subject to injury from drift. But altogether the tract is an inferior one as regards natural advantages. Of the cultivated area of the Dhúia 63 per cent. is classed as sand (bhur), and 30 per cent. as light loam (randi), while only 7 per cent. is irrigated.

Samr ála:

Hindú Jats hold 49 per cent, of the area, Muhammadan Jats 27, and Muhammadan Rajputs 7. The Muhammadans are found in the villages on the high hank just over the Bet; and the character given to these in the Bet applies to them. The Hindu Jats are not so well-to-do as mon of their class generally. They are for the most part industrious; but the soil is very inferior and yields but a poor return for their labour, and they find it difficult to subsist. Of the cultivated area 938 acres (31 per cont.) are held by tenants with rights of occapancy, and 6,226 (241 per cent.) by tonants-at-will; in all 7,164 acres, or 28 per cent. About 6 per cent. of the whole area has been sold since the Regular Settlement, and of this two-thirds to strangers of the money-leading class; while 81 per cent. is mertgaged with possession, three fifths to strangers. The prices per acre are Rs. 18 for sale, and Rs. 15

Land Revenue. Samrála: Lower Dháia

Circle.

CHAP. 111. C. secured by mortgage; and the low averages show that the land is not valued as an investment. There is not much debt outside of these figures, for money cannot be raised without the security of the land. Complaints are made very generally; and a good many of the villages are badly off. Discontent is general, and there can be no doubt that the tract is by no means in a flourishing condition, a result that may be attributed chiefly to the poverty of the soil. The assessment of the Settlement Officer in 1852 was not very well received; and was revised in 14 out of 30 villages by the Commissioner, who gave a reduction on the whole jama of 41 per cent.

The revenue rates finally sanctioned and their results are shown below:

Soil,	Area in	Rate,	Rosulting jama.	Half arest estimated.	Former as-
Bet { Irrigated	2,275 948 1,811 641	Rs. a.p. 4 8 0 8 0 0 1 12 0 8 0 0 1 0 0 0 10 0	Rs. 773 6,825 1,659 8,933 6,411 8,698	Rs. 1,111 9,193 2,374 4,771 5,074 8,389	RE,
Total	25,035	1 2 1	28,209	39,912	25,692

The above gives an increase of Rs. 2,407, or 8 per cent. The assessments actually aunounced amounted to 11s. 28,154, and were well received. The tract is a very poor one; but the assessment was and still is very light; and there is some very good land in the villages adjoining the Bet, and again in those next to the Upper Dháia Circle.

Semrála: Gordon

The Samrala Upper Dhaia Circle contain 170 villages with a total area Upper Datis of 126,324 acres, of which 107,750, or 84 per cents, are cultivated; 8,627 Oircle. culturable or recently out of cultivation; and 9,947 Government property or Walker, S. R., unculturable waste. It stretches south from the Lower Dhaia in a plain of uniform surface, except where two belts of sand, each of about one mile in width, run across it from north-east to south-west. The soil varies from a stiff clay to a light sand, the latter being found in the neighbourhood of these belts, and the former in depressions. The prevailing soil is a good loam, generally of dark colonr, friable and most fertile. The percentages of soils according to our present classification are-irrigated, 42; clay, 3; loam, 43; sand, 12.

Gordon § 285.

Of the revenue-paying area 80 per cent. belongs to Hindu Jats, 81 to Walker, S. B., Muhammadan Rájpúts, 21 to Muhammadan Gújars, and 21 to Muhammadan Jats. The Hindú Jats are a most industrious and thrifty class; and it is fortunate that the proportion of them is so large. The Muhammadan Ráipúts are notorious for their improvidence; and are the worst possible revenue-payers. At the Regular Settlement this was fully recognized, and allowance was made in the assessments of their villages; but such consideration has not had much effect on their condition. They are, as a class, very much involved in debt; their villages contribute most of the area in the returns of sale and mortgage. The returns show 1 per cent. of the total area sold since the Regular Settlement, but nearly three-fourths of this has gone to coparceners. The average nominal price realized is Rs. 35 an acre. The land mortgaged with possession of the mortgagee amounts to 41 per cent. of the whole, and of this nearly one-half is in the hands of members of the

village community. The whole area transferred to the money-lending class proper by sule and mortgage is thus about 2 per cent. The amount secured per acre on usufructuary mortgage is Rs. 27. The inference to be drawn from these figures is that only a small portion of the land has changed hands, and that very little of it has gone to the money-lending class. The ordinary Jat is most tenacious of his land, and the price paid shows how it is valued.

CHAP. III. C Land Revenue.

Sa m rála : Upper Dháia Circle,

The actual condition of the tract agrees with the result of these statistics. The people are uncommonly well-to-do, except in some of the Rajput villages where the thriftless habits of the landowners are bringing them to ruin. But the money-lender has scarcely any hold at all on the Jats, nor is he ever likely to have more. There is a good deal of hard cash mnongst them; and, if oue of the number is in difficulties, he can always find some of his fellows to make an advance on the usufract of a part of his land. There is of course a certain amount of fleating debt; but this is no more than a couple of good harvests will clear off. If a money-lender has got a hold on the borrower he will insist on having the hand and receiving a share of the produce; and it is a sure sign of the temporary nature of the debt when the land remains with the proprietor. There are not many external signs of prosperity such as one is led to expect from the experience of other Districts. The people are very fond of their money, and waste none of it on show. The houses are neat, but have soldom any pretonsions. A well-to-do Jat has no herse and not mere cattle than he absolutely requires. He dresses very plainly, and spends little on the clothes and food of his family. His great aim is to get some more land into his hands; and he will keep his savings till a clumce occurs of investing them in a mertgage. The best evidence of the prosperity of the agricultural population is that they can always disposo of their surplus produce to whom they like, and when they like. In most houses will be found stocks of grain er cotton more than sufficient for the use of the household, and kept in the hopes of a rise of prices. The gur is bought up from thom as fast as it is made. They have not even the trouble of taking their produce to market, for there is a keen competition between the traders, who go mnongst the villages and buy on the spot. The Juts are enreful to get a good price; and the margin of profit loft to the trader is never excessive.

The now rates proposed by the Settlement Officer and the results of their

Soit. Arcs. Rate. TOTAL. Jama. Rs. 4 3 3 Rs. 70,236 Rs. 12 8 0 Niai. 10,049 ••• 28,701 Simple well 1,00,705 Other irrigation 28 81 ••• Rausti 49,530 1 C CS,112 2,56,875 Dhúr 11,078

application wore as given in the margin. The assessment of the last year of the Regular Settlement, including nominal assessment of revenue-free grants, was Rs. 2,07,206; and the proposed assessment would have given an increase of Rs. 49,579,

or 24 per cent. The Lieutenant-Governor, in sanctioning these rates, requested the Financial Commissioner to impress upon the Settlement Officer the necessity for treating with care and leniency those villages in which, from the small size of the heldings, an increase was likely to be felt, and His Honor further considered that 20 per cent. should be the maximum increase to be taken in the circle. The actual results raised the assessment from Rs. 2,07,613 to Rs. 2,46,293, an increase of Rs. 38,650, or 19 per cent. This increase was somewhat under that directed; but it was found that there were several Muhammadan villages in which the Settlement Officer had to go very far below rates. With the exception of these villages the enhancement was evenly distributed over the tract, and the new assessments were well received.

CHAP. III, Ç. Land. Revenue.

Walker, S. R.,

The first circle for consideration in the Ludhiána Tahail is the mand or strip of land along the bank of the river; and in this have been included enly the villages of which the greater part of the area is liable to annual inundation. The circle contains 15 villages with an area of 8,757 acres, of which only 2,677, or 30 per cent., are cultivated; 3,487, or 39 per cent., culturable; and 480, or 5 per cent., lately abandoned. The remainder, 26 per cent., is unculturable. The small proportion of cultivated area to culturable and barren is not Gordon to be wondered at in a tract like this. The unculturable is saud along or in the bed of the river, and the culturable is the ordinary new laud found on its banks, covered with a growth of pilchi or of reeds. Most of this will eventually be cultivated, unless destroyed by the river. The land of this circle is nearly all liable to annual inundation; and people live in adjoining villages of the pakka Bet, and sometimes in a corner of their own, as the land is under water during most of the hot weather. The silt left by the overflow of the river is generally very fertilizing, and the land is really renewed annually. The soil is a clay-loam on a substratum of saud. When the deposit has attained a depth of nine inches to a foot, the plough can be worked in without bringing up the sand, and cultivation is possible. But good crops cannot be grown

unlsss the sand is from one to three feet distant from the surface, the further the better.

Gordon

The land is held by the various tribes, thus: Muhammadan Rájpúts, 57 Walter, S. R., per cent.; Muhammadan Gujars, 10; Muhammadan Jats, 14; Hindú Lebánas 55 242 & 243, and Banjarás; 16; others, 3. The Muhammadans are not well suited to the ups and downs of an alluvial circle, but they are fairly well-to-do. The Banjáras engage a good deal in trade, and de net depend entirely en cultivation. Of the total area less than one per cent, has been sold since the Regular Settlement, and 8 per cent. is new held in mertgage. The price in the case of sale is Rs. 40 an acre, and the mertgaged money per acre Rs. 17. The whele area mortgaged has gone to money-lenders; but it is made up almost entirely by one Rajput village, of which the whole land has been mortgaged. With the exception of this one village the circle is in good condition. The produce is excellent and the people keep out of debt, and are generally well-to-do. But they are of course liable to lose their land any year from the action of the river. The Regular Settlement gave a large reduction on the jama of the summary assessment, and was 20 per cent. under rates. The present assessment is very light.

Gordon Walker, B. R., § 245.

The marginal statement shows the rates sanctioned and their result as

. Soil	Area.	Rate.	Resulting assess- ment,	Half asset estimate,
Irrigated Dofaeli Ekfaeli	 Rs. 24 1,283 1,870	Rs. a. 3 12 2 12 1 13	Rs. 90 3,558 2,897	Rs. 141 4,798 2,858
Total	 		6,045	7,797

compared with the produce estimate. As in Samrála it was expected that the village asssssments would fall short of the above total on account of new land favourably assessed; and, in the case of the land included in the kachha chak, or area liable to annual assessment, dofasti

rates of Rs. 2-10 and Re. 1-10 were to be applied instead of the full rates. The assessment announced and reported amounted to Rs. 4,900, as against a total by rates of Rs. 5,039, there having been considerable changes in the area of the report, as in the case of Samrala; and the enhancement on the demand of the last year, Rs. 4,049, was 21 per cent.

Bet I Pakka comprises the rest of the villages of the Bet pertion of Bhartgarh and Sahnowal purganas. It contains 58 villages with a total area of 32,048 acres, of which 21,:37, or 66 per cent., are cultivated; 8,078, or 25 per cent., culturable or lately abandoned; and 2,733, or 9 per cent., barren waste. Part of the land of one or two villages is in the mand and subject to inundation, but with this exception the tract lies high, boyond the direct influence of the river. Towards the high bank, too, very tew villages Girele. adjoin the Budlin Nala, which runs for the most part through the Bet portion of the Lower Dhaiz Circle, "there are a good m. i, u clas or streams running weight across the tract, which fill in the rains, but seldem overflow their banks. The soil, like that of Bet lands generally, is a still dark clay-loam on a substratum of sand, very tertile when properly cultivated. The water level is near the surface, and there is always abundance of moisture. In places there is tendoney to kallar; but this is not common, and laml so affected is mostly menhivated. Sand ridges occur, but the sand does not shift. The stratum of clay is shallow here and there and tho sand uppears on the surface; but, as a rule, the chry reaches to 5 or 6 feet below the surface. Irrigation is everywhere easy, water being found at a depth of 8 to 12 feet, and there is more of it than in Samrala Bet. The proportion of irrigated land is 5 per cent, of the cultivated area of the whole carele; but it lies mostly in the villages to the west. In the eastern part, as in the Saumala Bet, arrigation is not required, and superior or dofails cultivation is carried on in the immrigated land.

CHAP. III. C. Land Revenue.

Ludhiana : Gordon Walker, S. R.,

Of the whole area 93 per cent, is held by Mulmannadans, thus: Rájpúts, 22; Gujars, 34; Jats, 19; Arains, 7; others, Awans and Suyyids principally, Walter, S. R. 11. The Hindus, who hold 7 per cent., are mostly Lobanas. The Rapputs \$ 248. are bad husbanduren, and do not willingly cultivate their own land. The Jats and Gujars are more industrious and well-to-do. The condition of the tract is better than that of the Saurada Bet, a result that may be uttributed principally to the small area under sugarcane cultivation, for where cane is grown the cultivator is driven to the money-lender. There is no such engerness here on the part of the money-lenders to make advances to the agriculthrists; and the latter are more thrown on their own resources, and, as a rule, ineur debt only when compelled to do so for a marriage, on account of a bad harvest, or for some such cause. They ordinarily live on the grain that they grow themselves. Some of the villages, such as Kariana, Bahewal, &c., are very prosperous; and few me really much involved, though proprietors in most will be found in dobt. It cannot, on the other hand, he said that there is a great deal of wealth in the circle. The wheat and cotton are mostly sold; and good prices are realized for vegetables, which are bought by traders from the city, and for straw sometimes. The proportion of the agricultural population who are well-to-do, and can dispose of their own samplus produce when they like, is considerable; but not nearly so large as in the Dhaia. Such money as may be saved is generally kept in hard cash or invested in land. There is no display of brass dishes, &c., for the Muhmmadans do not use them; and only sufficient cattle are kept for the use of the household, except by the Chijars, who dispose of the milk and ghi produced by their bullaloes and cows.

Of the total area 11 per cent, has been sold since the Regular Settlement, and 61 per cent. is now in mortgage. Of the sales 33 per cent, are to nori- Walker, S. R. culturists, and of the mortgages 50 per cent., so that the area transferred since \$ 219. the Regular Settlement to the monoy-lending classes is less than 5 per cent. on total area, and 64 per cent. on cultivation. The average price per acro is for sale Rs. 46 and for mortgages Rs. 34. There is a good deal of money owed on book accounts, as might be expected from the character of the people

CHAP. III, C. Land Revenue for Muhammadans seldom get on without the assistance of the moneylender; but the dobt of this sort is not nearly so great as in the Samrála Bet, nor does it press vory hard.

Ludhiána: Bet I Pakka Circle. Gordon Walker, S. R.,

§ 258,

Soil	Area.	Rato.	Result- ing jamo,	Hulf asset estimate.
Irrigated Dofasis Ekfasis	 1,118 7,016 13,103	Rs. a. 3 12 2 3 1 7	Rs. 4,192 17,540 18,836	Rs. 6,051 21,458 22,704
Total	 	***	40,509	50,243

The rates sanctioned for this circle and the resulting assessments are shown in the margin. Some villages in this circle, too, contain new alluvial land which had to be assessed favourably; and the assessments announced gavo a total of Rs. 41,519, being an enhancement of 20 per cent, on the demand of the last year (Rs. 34,207), and tho jama given by rates for the year of announcement being Rs. 41,602.

5 254

Assessment Circle Bet II is the western part of the Ludhiana Bet, Bet II Circle and includes nearly the whole of pargana Núrpur. It is about 12 miles in Gordon length and 4 in breadth, and contains 67 villages with a total area of 41,305 Walker, S. R., acres, of which 26,121, or 63 per cont., are cultivated. There has been a loss by diluvion since the Regular Settlement of 14 per cent, of the total area, and some villages have lost almost the whole of their land. A Kachha Circle was not separated off, because there is very little good mand. The soil of Bet II is for the most part much inferior to that of Bet I (Pakka), and the rainfall is considerably less. The Budha Nála is the boundary of the circle to the south, and joins the river just outside it, so that all the land on the north bank of this stream is included. This is in parts very inferior, being either unfit for cultivation, or yielding very poor crops, and that not every year. Kallar is more prevalent than in the eastern Bet, and barren patches are to be found in the best wheat fields, especially about Núrpur. As in Bet I irrigation is easy, water being at about the same depth. The proportion of irrigated land is 9 per cent, to the cultivation.

Gordon § 250.

The land is thus distributed amongst the agricultural classes: Muhaur-Waller, & R., madan Gújars, 44 per cent.; Minhammadan Rájpúts, 10; Muhammadan Aráins, 10; Muhammadan Awans, 11; Muhammadan Dogars, 10; Hindús, 1; others, 11. Gujars predominate as proprietors. The Arains are very common as tenants, besides cultivating a large proportion as propriotors. The Awans and Arains are, as a rule, woll-to-do, and so are the Gujars in the villages away from the river and near the city. The tract is for the most part in fairly good condition. The villages on the margin of the river, which belong mostly to Gujars, have lost a great deal of land, and the propriotors have become involved on this account. But there are a number of first-rate villages removed from the rivor with a great deal of irrigated land, belonging to all classes of proprietors. The people of these derivo great benefit from the proximity of Ludhiana, where they have a ready market for their produce of all sorts, and whence they can obtain a plentiful supply of manuro. Tho Regular Settlement gave a small reduction on the summary assessment. The revenue has been realized without any difficulty, except in one or twe of the Gujar villages along the river, which have suffered most from its action. The returns show 31 per cent. of the total area (or 51 of the cultivated area) sold since Settlement, and 41 (or 7 of cultivation) held in morigage now. The prices per acre are Rs. 37 for sale and Rs. 29 for mortgage, the price per rupeo of Government demand being much the same as in Bet I. Of the land sold two-thirds has gone to agriculturists

PART A.

one-third of the mortgaged land is held by them. Thus the proportion nd transferred to outsiders is 41 of the total, or 6 per cent. of the ated area.

CHAP. III, C. Land

The rates sanctioned and the resulting assessments are given in the

margin. When the assessment Bet II Oirole. given by the rates came to be distributed over the villages of this circle it was found that, even after making allowance for the new alluvial lands, the rates gave higher jamas than

Ludhiána : Waller, S. R.,

Soil.		Area.	Rate.	Result- ing nascaa - ment.	Half asset estimate.	given by the rates came to be distributed over the villages of this circle it was found that, even after making allowance for the new alluvial lands, the
ed	•••	2,454 1,458 22,209	Rs. n. 3 12 1 10 1 4	Rs. 9,202 2,369 27,761	Rs. 11,036 2,994 29,428	rates gave higher jamas than could be taken; and those finally reported amounted to Rs. 35,535 as against a rate
otal		•••		89,882	43,458	jama of Rs. 36,738, which was still an actual increase of 23 per cent. on the last year's
						damand of Re 28 288

demand of Rs. 28,288. The Lower Dháia Circle of Ludhiána is a continuation of that of Sam-Lower Dhaia and a detailed description of it is not necessary. It extends for the whole Circle, Gordon

th of the Tahsil, and contains 78 villages with a total area of 73,604 Gordon, of which 79 per cent. is cultivation. The Dhaia portion is much Walker, S. R., r than that of Sanrála, because several fine villages have been included, \$\frac{5}{2}\$ 261 & 262. he percentage of irrigation and good soils is as follows: irrigated, $7\frac{1}{2}$; i, 621; while bhúr is only 30 per cent. The crops and husbandry of the Dhaia portion are the same as in

ala, while in the Bet lands they agree with those described for akka Bet Circles of Ludhiana. The land is divided thus between various agricultural tribes: Muhammadan Rájpúts, 30 per cent.; mmadans Gújars, 9; Muhammadan Aráins, 4; Muhammadan Jats, 3; mmadan Awans, 6; other Muhammadans, 6; Hindu Jats, 35; other ús, 7. The Muhammadaus hold the villages along the high bank, with land in Bet and Dhaia; and the Hindus, those adjoining the r Dhaia. Some of the large villages along the high bank belonging apputs are in very bad condition. The lands of these (both Bet and i) are not very good, and the cultivation poor; but the assessment is mely light, and it is entirely owing to the thriftless habits of the proors that they are in such a state. The Hindu Jat, Awan and Arain es are all well conditioned, and there is little complaint of debt in most on. But the tract does not enjoy many natural advantages, and is, as ple, the worst off in the Tahsil. The assessment of the Regular Settlement considerable increase on that of the Summary Settlement; but it was ed without trouble, except in one or two villages where the lambardars nemselves in difficulties. On the whole, though some of the Dhaia lands ory inferior, the condition of the circle is not really bad. Of the total 3 per cent. has been sold since the Regular Settlement, but threeis of this has gone to agriculturists, while $7\frac{1}{2}$ per cent. is now held in rago, half of it by the money-lending classes. The prices realized are 5 an acre on sale and Rs. 28 on mortgage. The land sold and mortl is mostly in the Dhaia. In the returns are included two whole villages sold and one mortgaged), and this has run up the area. There is a deal of book debt, and the Rajput and Gujar villages more especially arge sums. Land fetches a very good price.

CHAP III, C. Land

Revenue. Ludhiána: Lower Dhain Circle.

The rates sanctioned and the resulting assessments are shown in the marginal etatement. The Settlement Officer was directed in the orders sanc-

	Soil.	Aros.	Rate.	Resulting jama,	Half ossets estimate.
Dháia. Bet.	Irrigated Dofasi: Ekfasii Nids chdhi Khdlie chdhi Rausi; Bhúr	1,439 2,675 6,580 2,444 1,169 29,933 14,509	Rs. a. 3 12 2 4 1 4 3 8 2 8 1 2 0 12 1 4	Rs 5,396 6,018 8,162 8,554 2,922 33,674 10,882 75,608	Rs. 8,874 7,075 7,894 11,256 8,380 80,454 9,612

tioning the rates to go above them and to take up to a 10 por cent. chlancement if it appeared prudent to do so. No difficulty was experienced in taking a total assessment of Re. 80,100 as against an assessment by rates of Re. 79,341(1); an ouhancement of 10 per cent. on the last year's jama of Rs. 71,404.

Ludhiána: Gordon Walker, S. B. § 266.

The Upper Dháia Circle contains 112 villages with a total area of Upper Dhaia 108,145 acres, of which 95,135, or 88 per cent., are cultivated. It is the central portion of the Talish, stretching right across it. The greatest length from east to west is 22 miles, and the breadth varios from 2 to 12. The tract does not differ much in character from the Sauntila Upper Dhaia. The soil is generally somewhat lighter, and the surface cut up more irregularly by saud ridges; but stretches of as good loam as any in Samrala ocour, and the proportion of actually inferior soil is not quite so great. The water level lies at about the same depth (40 feet), and irrigation is quite as easy. The proportion of irrigation is less here than in Sannála (22 as against 42 per cent.), and there is not so much high cultivation. But the mirrigated lands at all events are equal to those of Samrala, perhaps even better adapted to dry cultivation. The proportion of irrigation, rausli and bhur are-irrigated, 22 per cont; rausli, 63; bhúr, 17.

Agricultural tribes and tenures. Walker, S. R.,

The proportions of land held by the various agricultural tribes are-Hindu Jats, 86 per cent.; other Hindús, 8; Muhammadan Jats, 3; others, 3. Of the Hindu Jats the Garewal got hold 26 per cent, of the whole area of Gordon the circle, the rest being divided between the Gil, Sckhon, Dhilon and other gôts. The Garowals are probably not much inferior as cultivators to the others, but more given to extravaganco. Most of the land of the circle therefore belongs to the best class of agriculturists. The cultivating percentages areby proprietors cultivating their own land, 76; by occupancy tenants, 4; by tenants-at-will, 20. The land under tenants-at-will is thus made up by mortgagors cultivating their own land, 21; by proprietors of other land, 91; by tenants who have no proprietary or occupancy rights, 8.

Gordon

Of the total area 2 per cent has been sold to agriculturists since the Walker, S. R., Regular Settlement, most of it (§ths) within the village; and only one-half per cent, has gone to money-lenders. The proportion of area mortgaged is 4 per cent. to money-lenders, and of this about one-third is without possession of the mortgagee. The total transfers amount to 21 per cent, sold since Regular Settlement and 8 per cent, now in mortgage. In such a large circle it might be expected that the condition of all villages would not be alike. Some are weak, either on account of inferior soil, or because the people have got into debt in bad years and have not been able to extricate themselves. One or two villages were disorganized in the Summary Settlement and had their land transferred; but the tenacity with which it has been held by the purchasers, and the constant attempts of the original owners to recover it, show how much

⁽¹⁾ The difference between this amount and the figures of the above statement is due to anbsequent transfers of villages.

usli.

otal

íia Samrála.

14,332

Pavádh .Circle.

PART A.

valued. The great majority of the villages are strong communities, pery self-dependent. The proprietors seldom owe more money than they d pay off with a slight effort; and they are able to dispose of their surplus luce themselves in Ludhiána, and watch the market quite as keenly as the nary trader does. The dwellings present generally an appearance of perity, and there is more display of it than in Samrála. Good houses, I cattle, brass dishes, jewelry are the signs of wealth to be looked for, and tenures, are generally to be found. Most houses have a store of grain, the pro-

es tempt it out. Large sums of money are spent on marriages and funerals, avagance of this sort being greatly on the increase. Altogether there are istakable signs that the tract has thriven under the former assessment,

Agricultural

ch gave a has been	slight r collecte	eduction d withou	in the vi ut any tro	llages the uble at a	at had been summarily assessed il.
Soil.	Area.	Rate.	Resulting jama.	Half asset estimate,	The marginal statement gives the rates finally adopted for this circle and their results.
cháhi lis chahi iar a n d	12,437 8,170 60,196	Rs n. 4 8 3 4 1 6	Rs. 56,166 26,952 82,770	Rs. 65,715 30,442 95,158	The assessments announced amounted to Rs. 1,70,693, the result of the rates after such alteration in the limits of the circle as it was pagessary

0 14

The marginal statement gives the rates finally adopted for this circle and their results. The assessments announced amounted to Rs. 1,70,693, the result of the rates after such alteration in the limits of the circle as it was necessary to make, being Rs. 1,71,212, and the increase 17 per cent. on the previous demand.(1)

Pawadh Circle contains 39 villages with a total area of 34,972 acres, Pawadh which 27,332, or 78 per cent., are cultivated, and 5,867, or 16 per cent., Paw urable or recently abandoned. It embraces the upper part of pargana laudh, and is held in jagir by the Sardárs of Malaudh, with the exception of laudh, and is field in jagir by the Sardars of Malaudh, with the exception of the or four villages. There are two outlying villages attached to the circle. Pawadh does not materially differ from the Upper Dhaia, except that the is generally harder, containing more clay, and better adapted to irrigated in to unirrigated cultivation. There are one or two sand drifts and lighter in their neighbourhood, but a stiff loam of dark colour predominates, a water level is closer to the surface, being generally at a depth of about feet. Irrigation from wells covers 29 per cent. of the cultivation. The rage population per square mile of cultivation (630) is much higher than the circle of the Tahsil, and only a little lower than that in Homer

12,469

12,541

1,78,429 2,00,784

Of the total area 94 per cent. belongs to Hindu Jats of the Bhander and cellaneous gôts. They are a most industrious and thrifty race, and no or tract can show such a large proportion of good cultivators. Even amongst s the people of the Pawadh are noted for their industry. Proprietors cultie 82, occupancy tenants 2, and tenants-at-will 16 per cent. of the area.

my other circle of the Tahsil, and only a little lower than that in Upper

Walker, S. R.,

The returns show that of the whole area $1\frac{1}{2}$ per cent has been sold since Regular Settlement, while 7 per cent. is now held in mortgage. About f of the sales have been to other members of the village community and y a third to non-agriculturists. About a quarter of the mortgages are hout possession of the mortgagee, while the whole of these and about half mortgages with possession are to money-lendors. The people have by

⁽¹⁾ See footnate to last page. An interebange of willages between these two circles was id necessary.

CHAP. III. C. Land Revenue. their thrift and industry attained a condition of great prosperity, and the villages are almost without exception held by strong independent communities. In fact there is no village that can be said to be badly off, while some are notorions as containing great wealth. The propriotors dispose of their produce either to traders on the spot or take it to Ludhiana, and thoro is not much debt of any sort. The villages were not assessed in the Summary Settlement, bnt Section 10 of Mr. Barnes' Re-

Ludhiána: Pawádh Circle

Re. bnt Section 10 of Mr. Barnes' Re-Jagardars estimate of their collections . 1,15,038 view gives the marginal details for .. 74,950 the wholo jágir, that is this and the Regular Settlement assessment Jangal Circle.

The jagirdars took in grain and in cash, and their estimate was naturally exaggerated, though not very much; and there is no doubt that they took the equivalent of nearly half as much again as the Regular Sottlement assessment. The rates at which they made their collections were little, if anything, under proprietors' rates, and the Regular Settlement assessment gave a reduction of nearly two-fifths on these.

Gordon Walker, S.R., § 275.

	Soil,	Arca,	Rate.	Resulting passessment.	Half asset estimate.
į	Nili cháhi Khális cháhi Ransli and Dölhar Bhár	6,949 1,341 16,228 3,114	Rs. a. 4 2 3 0 1 4 0 13	Re. 27,427 4,023 20,285 2,530	Rs. 28,879 4,145 21,776 2,577
	Total	***	.	54,265	57,377

In the margin is a statement of tho sanctioned rates and the results. The assessments actually announced amounted to Rs. 54,360, an enhancement of 22 per cent.

Ludhián a : 6 270.

The Tihara Circle contains 62 villages with a total area of 66,112 neres, Tibéra Circle. of which 59,167, or 90 per cent. are cultivated. It is the south-west corner of Gordon the upper part of the Tahsil, and comprises the whole of pargana Pakhowal, Walker, S. R., and some villages of Ghungrana. The natural features of the circle do not differ very much from those of Upper Dhaia. The soil is somewhat lighter, and although the water-level is nearer to the surface (about 35 feet generally), irrigation is not so common, only 15 per cent. of the cultivation being irrigated. Of the unirrigated area 78 per cent. is good soil (that is dakha or aush) and 22 bhur or sand. There is no proper record of the rainfall; but it may be taken as two or three inches less than that of the last two oircles. The present donsity of the population is 493 to the square mile of cultivation.

Gordon §§ 278 & 279.

Of the land of the circle 84 per cent, is cultivated by proprietors, 2 by Woller, S.R., occupancy tenants, and 14 by tenants-at-will. Hindu Jats own 78 per cout. of the area; and there are one or two Rajput villages, this tribe having 9 per cent. of the whole land. The principal gôts of Hindu Jats are Garewil 13, Dháliwal 10 and Bhander 4 per cent. The Rájpúts of the circle are perhaps worse than their class generally, more thriftless and worse cultivators. Most of the villages are in very good condition, being in the hands of large and strong communities. The Rajputs are in debt; but the Jats are well-to-do, and, as a rule, independent of the money-lender. A succession of good harvests and the high prices now realized for the inferior grains grown in unirrigated hand have brought a great deal of wealth into the circle, and in every village some of the proprietors are engaged in trado and own carts or camela which they ply for hire. Numbers too are in the sorvice of our Government or of the Nativo States about. The houses are well built and comfortable, and generally contain good stores of grain and cash. It was not found necessary to give much reduction of assessment in the Regular Settlement (about 3 | 1871 cent.); and the present jama has been collected without any difficulty. Of the total area three-quarters per cent, is shown as sold since Regular Settlement, and of this most has gone to agriculturists. The registration returns, which Jangal Circle.

[Part A.

up to date, give a much larger area, amounting to 14 per cent, of the le. The area now hold in mortgage is 4! per cent, with possession of gages and one per cont, without possession. Of the former about one-ities to considers and two-thirds to agriculturests. The price of hand sold is 72. while the average money secured on mortgage with possession is Rs. 37. sale the price per rupes of Government revenue is Rs. 50 and for morter Rs. 26. The price realized for land in this circle is by the returns higher t in any other, and there can be no doubt that this is the sort of hand that more attractions to an investor.

CHAP. Land Revenue.

Ludhiana: Tibara Circle.

Sod.	Anz	Rate,	Resulting ment,	Half need colimate.
e ¹ (b) 12 557 ¹ 1 14	5917 0,310 39,117 11,213	R4, n, 1 p 2 12 1 1 0 12	184, 23,745 2,102 84,851 7,537	11+, 29,602 10,137 45,745 6,729
iat		•••	£! ¹ ,553	27,271

the murgin is a statement of the revenue rates Walker, S. B. sanctioned for this circle, with the results on the figures of the Assessment Report. Tho nescesments annonacod amounted to Rs. 95,998, the juma by rates being, after the transfer of two or three villages from the Upper Dhim Chele, Rs. 96,073, and the enhancement to 20 per cent.

Gordon

The Jangal Circle contains 29 villages with a total area of 69,026 neres, bitch 55,208, or 85 per cent., are entirented, and 7,479, or 11 per cent. Jungat Circle. The villages are all held in jugir by the Malaudh family, and lie to watter, 8, R., conth of the Jugain Taheil in detached groups surrounded by Nabha and idla territory. The distance from Khish, the most morthern village, to in Challer, the most conthern to the past conthern is taggle 40 makes. The latter is a page. ini Chular, the most southern, is trearly 40 miles. The latter is more thalf way from the boundary of Jugaion Tahail to that of the Ferozepore triet. The principal groups are those of Sabaa and Dhapah, which are went and between their contain 21 villages. Salma may be taken as the ere of the tract, and it is 24 miles from the nearest point of Tilmar Circle. villages me very large, averaging 2,300 neres of total area; and the sites at great distances from each other. This, with the uneven character of the face and the absence of irrigation, gives the country rather a wild appearance. e, although there is really little more waste had than in any part of the rict. In place, great ridges of sand occur, but they are not common; und soil is generally a good loam, sometimes with a considerable mixture of clay. e returns give the proportion of bhar or sand to good soil as 13:87. There little irrigation in the first two vallages of the circle; and there was some nerly in a village of the Salum group, but the latter has been given up as profitable. Water is found ut a depth of 7b to 1:10 feet; and is with conarable difficulty raised in the wells round the villago sites which are used for iking proposes.

Of the cultivated area only 8 per cent, is held by tennuts, who mostly pay cind. Hindu Jats hold 86, and other Hindus 9 per cent, of the area. The ple of the Jangal villages are a very fine race. They have little labour to in the fields, and spend their spare time profitably in moving about and sing up what they can by trade, while a great many of them take service ho nray. No part of the district has such a reputation for prosperity us circle. The people of the more highly cultivated parts are never weary of ing one what immenso profits the Jungal zamindars are making and what an indance of land there is, and there can be no doubt that a succession of ed seasons, and the great denumed for the inferior grains, which are the ncipal staples, together with the trading ladits of the people, have raised. general condition of the tract within the last ten or litteen years much re, comparatively, than that of any other. There is every sign of prosperity

CHAP. III. C. Land Revenue.

their thrift and industry attained a condition of great prosperity, and the villages are almost without exception held by strong independent communities. In fact there is no village that can be said to be badly off, while some are notorious as containing great wealth. The proprietors dispose of their produce either to traders on the spot or take it to Ludhiana, and there is not much debt of any sort. The villages were not assessed in the Summary Settlement,

Ludhiána : Pawádh Circle

but Section 10 of Mr. Barnes' Re-Rg, Jágirdors estimate of their collections . 1,15,938 view gives the marginal details for Regular Settlement assessment 74,950 the whole jagir, that is this and the Jangal Circle.

The jagirdars took in grain and in cash, and their estimate was naturally exaggerated, though not very much; and there is no doubt that they took the equivalent of nearly half as much again as the Regular Sottlement assessment. The rates at which they made their collections were little, if anything, under proprietors' rates, and the Regular Settlement assessment gave a reduction of nearly two-fifths on these.

Gordon Walker, S.R., 6 275.

Soil.	Area.	Rate .	Resulting assessment.	Half asset estimoto.
Niúi cháhi Khális cháhi Rausli and Dókhor Bhúr	6,649 1,341 16,228 3,114	Rs. a. 4 2 3 0 1 4 0 13	Re, 27,427 4,923 20,285 2,530	Rs. 28,879 4,145 21,776 2,577
Total	***		54,265	57,877

In the margin is a statement of the sanctioned rates and the results. The assessments actually announced amounted to Rs. 54,360, an enhancement of 22 per cent.

Ludhián a :

The Tihara Circle contains 62 villages with a total area of 66,112 acres, Tibám Circle. of which 59,167, or 90 per cent. are cultivated. It is the south-west corner of Gordon the upper part of the Tahsil, and comprises the whole of pargana Pakhowal, Walker, S. R., and some villages of Ghungrana. The natural features of the circle do not differ very much from those of Upper Dhaia. The soil is somewhat lighter, and although the water-level is nearer to the surface (about 85 feet generally), irrigation is not so common, only 15 per cent. of the cultivation being irrigated. Of the unirrigated area 78 per cent, is good soil (that is dakha or aush) and 22 bhur or sand. There is no proper record of the rainfall; but it may be taken as two or three inches loss than that of the last two circles. The present density of the population is 493 to the square mile of cultivation.

Gordon Walker, S.R., §§ 278 & 279.

Of the land of the circle 84 per cent. is cultivated by proprietors, 2 by occupancy tenants, and 14 by tenants at will. Hindu Jats own 78 per cent. of the area; and there are one or two Rajput villages, this tribe having 9 per cent. of the whole land. The principal gots of Hindu Jats are Garewal 13, Dháliwal 10 and Bhander 4 per cent. The Rájpúts of the circle are perhaps worse than their class generally, more thriftless and worse cultivators. Most of the villages are in very good condition, being in the hands of large and strong communities. The Rajputs are in debt; but the Jats are well-to-do, and, as a rule, independent of the money-lender. A succession of good harvests and the high prices now realized for the inferior grains grown in unirrigated land have brought a great deal of wealth into the circle, and in every village some of the proprietors are engaged in trade and own carts or cancle which they ply for hire. Numbers too are in the service of our Government or of the Native States about. The houses are well built and comfortable, and generally contain good stores of grain and cash. It was not found necessary to give much reduction of assessment in the Regular Settlement (about 3 per cent.); and the present jama has been collected without any difficulty. Of the total area three-quarters per cent, is shown as sold since Regular Settlement, and of this most has gone to agriculturists. The registration returns, which

III. C. Land Revenue. Ludhiána:

CHAP.

in the circle. The houses are large and comfortable, the cattle superior to those of any other parts, and a large propertion of the proprietors own carts or eamels with which they go all over the country, disposing of their own grain or earrying for hire. It is for this purpose that such high class cattle are kept, for inferior ones would do for agriculture. Perhaps the way in which money is now spent on marriage and other celebrations is the best proof of the Jangal Circle, profits made by cultivation. It is not uncommon for a Jat of these parts to spend Rs. 500 to Rs. 1,000 on such an occasion, and eases will be found where Rs. 1,500 had been wasted in this manner by proprietors of ordinary means. Of course this is extravagance and often leads to debt, but still it betokons the presence of wealth.

> The area returned as sold since the Rogular Settlement is very small (about one-third per cent.). The area mortgaged is 10 per cent. of the whole area, but of the 6 per cent, is to agriculturists of the village and 21 to nonagriculturists, while 81 per cent, is mortgaged with possession of mortgaged and 11 per cent. without possession. The latter is all to monoy-lenders. It has elsewhere been remarked that land was often mortgaged where there was no real necessity, and this is the ease with the greater part of the mortgages in this eircle to fellow-sharers of the village. The mortgage is sometimes merely a form of tenure, the proprietor being unwilling or unable to cultivate himself, and the mortgagee paying down a lump sum for the right of ealtivation, which he retains tall the money is repaid. The price of the land sold averages Rs. 58 an acre, or Rs. 79 per rupee of Government revenue, but the area on which the average is calculated is small. The average per acro of mortgage monoy is Rs. 30 or Rs. 60 per rupee of the Government demand. These prices are, comparatively with the revenue demand, higher than in any other eircle, and absolutely higher than in most. The people have been ablo te tide over my failures of harvest that have occurred during the currency of the Regular Settlement, and to pay their revenue punctually in the worst years. This they do from their stores of grain; for experience has taught them foresight to an extent that is not required in more favoured traces, and in the possession of most proprietors will be found sufficient grain for at the very least a year's food. The amount stored at any time will depend on the state of the market, for the people can always wait for favourable prices; but it is never reduced below this until the next harvest is insured, which may be before it is cut. The failure of a single harvest, though it may cripple the resources of the tract temporarily, can have no permanent effect. The failure of two harvests, that is a kharit and rabi in succession, would be more severely felt. The first result would be a great loss of eattle, many oither dying or being sold for next to nothing, and this is what actually happened in the droughts of 1862 and 1868. Besides suffering a great loss of cattle, many of the people would have after a time to incur debt for their own living. Since 1868 there has been a succession of good seasons, very few having been below the average; and this with high prices has not only removed the traces of previous bad years, but has raised the circle to its present state of prosperity.

The rates sanctioned for this circle and their results are shown in the

Soil.		Arca.	Rates.	Resulting assessment.	Half asset estimate.	
Jrrigated Rausli Bloke	•••	91 52,314 6,803	Rs. a. 1 6 0 11 0 8	Rs. 125 35,066 3,401	Rs. 401 47,705 4,459	
Total	•••	<i>,</i> •• .	111	39,492	52,565	

margin. These rates gave an increase of about 39 por eent.; but the actual onhancement was restricted to 33 per cent. on the former jama, and the assessments actually announced, which

amounted to Rs. 38,265, gave this proportion.

CHAP.

Revenue.

The Bet Circle of Jagraion contains 20 villages with a total area of 15,998 acres, of which 9,924 acres or 62 per cent. are cultivated; 4,239 or 26 per cent., barren waste; and the remaining 12 culturable or recently thrown out of cultivation. To the east, for about 6 miles, the river runs at some distance from the high bank; and between them lies a tract, 3 or 4 miles wide, similar to the Ludhiána Bet, having some land annually inundated, and the rest beyond the Bettircle. direct action of the river (kachcha or mand and pakka). From Bhundri west- Walter, S. R., ward the Dhaia and river arc only about a mile apart, and the floods reach almost § 289. right up to the former, while the villages are large, and their lands stretch from the river several miles south of the high bank. There are none of these entirely in the Bet, and a few have been thrown into the circle, although they have Dhaia lands also. In the western villages there is very little pakka Bet land. The Budha Nala runs through the eastern part of the Circle, and joins the river a mile to the west of Bhundri. Its banks are high, and it does no harm to the land, which is cultivated right up to them.

The landowners belong to the various tribes in the following proportions:

Gordon
Walter, S. R.,
Walter, S. R., Gújar, 39 per cent.; Rájpút, 28; Aráin, 15; other Muhammadans, 8; Hindu \$290. Jats, 7; others, 3. Of the whole cultivation 31 per cent. is by tenants and 69 by proprietors. The land under tenants is thus divided : held with rights of occupancy, 7 per cent.; cultivated by tenants who have rights of occupancy or ownership in other land, 11 per cent.; cultivated by tenants who have no such rights, 13 per cent. A large proportion of the land is in the hands of Rajpats and Gujars; and, as in the Bet tracts of the other tahsils, there is a good deal of debt, incurred principally from want of thrift; but there are great many well-to-do families in all three tribes-Rajputs, Gujars, Arnins; and some of the villages are in very good condition. The land just over the high bank is the poorest in the Tahsil; and most of the Dhaia villages have also land exposed to the direct action of the river, and therefore not always to be relied on. Some have suffered a good deal by loss of land, and this is a sure cause of debt; but on the whole the circle may be said to be in a fairly good condition. The patwaris' papers show 11 per cent. sold since Regular Settlement, and 10 per cent. (of the total area) as now held in mortgage with possession of the mortgagee. The proportion mortgaged to money-lenders is small (2 per cent. of the whole area). Nearly half of the area shown as mortgaged to agriculturists of other villages is in one single village.

The revenue rates sanctioned for this circle and the estimated results of

Half Resulting Scil. Rate. Area, asset jama. estimate. Re, Rs. Rs (Irrigated 12 287 8 1,686 1,076 2,263 2 Dofasli Ekfasli 4,526 5,200 3,586 4,170 ... 4,483 Chahi 91 0 273 259 259 318 ••• 2,149 3,438 0 10 2,952 14,824 Total 12,766

their application are Walter, S. R., shown in the margin. As in other Bet Circles the area to which the actually were rates applied differed from that in the Assessment Report, and the total of the villago assessments announced was Rs. 11,364 (the rate jama being Rs. 11,314), or an increase of 5 per cent.

The Lower Dhaia of Jagraon resembles that of the other two Tahsils. It consists in the first place of villages along the high bank, with some good Lower Dhaia Bet land, irrigated and unirrigated. Some of the villages in the western part run right down to the river and have Bet land, both inundated and beyond the reach of the floods, besides Dhaia land. The circle is about 14, § 291. miles from east to west and 8 from north to south. It contains 57 villages with a total area of 71,966 acres, or 12 square miles, of which 89 per cent.

Jagraon:

CHAP. Land Revenne. is cultivation. The village sites are generally just on the ridge, and the soil for two or three miles south of them is very light and poor. The surface is uneven in places, and the sand is shifted about by the strong winds from the south east. The crops and husbandry are much the same as those described for the corresponding circles of the other Talisils.

Jagraon: Loner Dhaia Cucle. Gordon §§ 295 & 296.

The ownership is thus divided amongst the various agricultural tribes: Hindu Jats, 70; Muhammadan Rajputs, 5; Muhammadan Gujars, 4; Muhammadan Arams, 11; and others, 10 per cent. The Muhammadans hold the villages along the high bank and nearly all the Bet land; the Jats, these further south. The enlivation is in the following proportion: by proprietors, 79 per cent.; cultivated with rights of occupancy, 8 per cent.; cultivated by proprietors of occupancy tenants of other land, 8 per cent.; by tenants with no proprietary or occupancy rights, 5 per cent. The Circle has not many natural advantages, for the soil is mostly poor and incapable of yielding very much; but some of the Jat villages adjoining the Upper Dháia are more favourably situated, and have good urigated and unirrigated ns well as poor lands. These are the best villages in the Circle, and in them the people are very well-to-do. In a few the proprietors are able to go in for a little trade; and the village sites present an appearance of prosperity-carts, good cartle, and some elaboration of the dwellings being the principal signs. some few Jat families have taken to money-lending. The villages adjoining the high bank are not at all well-off, both Jat or Muhammadan, and complaints are very generally made. On the whole the Circle is not in such good condition as would have justified much enhancement of the former assessment, but, on the other hand, there is nothing to show over assessment, for the demand was admittedly light. It is only of the poverty of the soil that the people complain. Of the total area of the Circle the Appendices to the Settlement Report show one per cent. as sold since Regular Settlement, and 10 per cent. as now held in mortgage. In both cases only about one-third of the land has gone into the hands of money-lenders; and most of the sales have been to members of the village community. The price realized is Rs. 40 an acre, or Rs. 39 per runce of Government demand; and the amount seemed per acre on morigage with possession, Rs. 29, or Rs. 28 per rupee of the demand. Those prices are higher than one would have expected from the nature of the soil.

Gordon Waller, S. R., 208.

Soil.	Area.	Rate,	Result- ing jama.	Half osset ostimate.
Châhi Dofash Ekfoeli Xuá cháhi Khâlis cháhi Raush Dhér	1,007 2,125 2,157 2,814 347 10,189 41,030	Rs. a, 3 12 1 10 1 4 3 S 2 8 1 2 0 12	Rs. 4,114 3,453 2,696 9,849 863 11,463 33,702	Rs. 6,673 3,579 2,253 11,260 935 10,067 32,157
Total	63,665		66,145	66,299

The revenue rates sanctioned are shown in the margin. The village assessments actually announced amounted to Rs. 67,012, or an increase of 7 per cent. on the previous demand, the jama by rates being Rs. 65,146. In the orders sanctioning the rates it had been indicated that, if possible, an enhancement somewhat over rates should be taken,

§ 299.

Jagráon:

The Upper Dháia Circle of Jagraon comprises the remaining villages of Upper Uhain the Tahsil, 98 in number, with an area of 175,94b acres, or 275 square miles. Circle.

Gordon The Circle varies in width (east to west) from 15 to 20 miles, and is about 18
Weller, S. R., miles from north to south. The Sirhind canal runs across the whole width. Of the total area 156,424 acres, or 89 per cent., are cultivated, and 11,864 (6 per cent.) culturable or fallow, the remaining 5 per cent, being barren waste or Government property. The soil varies a good deal, being in places a stiff loam which requires a good deal of moisture. Sand drifts occur throughout the Circle, and in their neighbourhood the land is somewhat inforior; but the prevailing soil is a good light loam (rausi) easily worked and very fertile. There are few villages that have not half of their land of this sort; and, even when the rainfall is short, sowing is possible in some of the land. The percentages of good and had soils are: rau-li and dakhar, 83 per cent.; bhur, 17. Of the cultivated area 8 per cent is irrigated from wells. This land lies mostly in the eastern and northern villages, which are Upper Dhain generally smaller and more populous. In the south-western villages the Orcio holdings are much larger, and irrigation is not required, while the water, too, is at a greater depth, being upwards of 50 feet from the surface at Hatur, and only about 85 in villages adjoining the Lower Dhaia.

CHAP III, C. Revenue.

Jagrion:

The land is thus held by the various tribes in ownership: Hindu Jats, 72 Gorden Walter, S. R. per cent.; other Hindús, 6; Muhammadan Rújpúts, 8; Muhammadan Gújars, §5301 8 302. 6; Muhammadan Arains, 4; others, 4. The principal gots of Hindu Jats are the Sidhus, Dhaliwals and Gils. The "other Hindus" are Kharris, &c, one or two families of the shop-keeping class having acquired proprietary rights here and there before the Regular Settlement. There are also some Hudu kamins (Chamars, &c.) who have propietary rights in a few villages. Tho Rájpúts hold several large villages, or parts of villages (Halwara, Talwanda, &c.). The Gujars and Arains hold land about Jagraon, one or two of tho Agreers or subdivisions of the land attached to the town belonging to them. There are also two or three small Hárni villages, and the family of Manlavi Rajab Ali own a good deal of land. Of the whole cultivation 78 per cent, is by proprietors and 22 per cent. by tenants, made up thus: cultivated with rights of occupancy, 5; cultivated without such rights, but by towarts who are proprietors or occupancy tenants, 11; by tenants without rights in any land, 6. The Hindu Jats of the circle are as a class very well off. Their villages are all fine large ones, in the hands of strong communities; but the members of these are not all equally well-to-do. Most have thriven, but a tew will be found to be in difficulties, and there is a good deal of extravagance due to the influx of wealth which often results in debt. The Jut propriotors have fully participated in the profits due to the greaters on price of the interior grains; and they have developed more expensive tastes, dressing well, keeping lots of brass dishes, and their women having a great deal of jewelry. The cattle, too, are of a superior class; and most villages have a good many carts and camels that are worked for hire or take the owners' grain to Ludhiana. Large sums are spent on marriage and funeral celebrations, and old men say these expenses have increased threefold; while litigation is a luxury that most of the people indulge in, and will often be found to be the cause of debt. The famines of Sambat 1917 (A.D 1862) and Sambat 1925 (1868) have left their traces in debt, which in many cases has never been shaken off; but the Jut population may safely be said to have theiren under our rule, and to be now in a state of considerable prosperity. Where one of them has got into difficulties and has to mortgage his land, a fellow Jat will always be found ablo and ready to advance the money; and they could get on very well without the assistance of the money-lending classes, and do so in a great measure. Few of them are unable to disposo of their grain at the market price; and they are generally able to take it direct to Ludhiána and sell it there. Most of them retain a stock of grain which would be sufficient for two or three years' consumption, and they can tide over indifferent harvests without much loss. During the last ten years a great deal of hard cash has found its way into their hands, and few of them would now have to borrow for the paymont of revenue in the worst of years. The Muhammadan villages are not so well off. Except the Raikot family, which holds a large area, the Raipots are all in difficulties, and that although special allowance was made for them in the Regular Settlement. The Arains and Gujars, too, are badly off. The

CHAP. Land Revenue.

returns show 3 per cent. of the whole area as sold since Regular Settlement, and 12 per cent. now held in mortgage, most of it with possession, Of the sales three-fourths are to members of the agricultural community and two-thirds of the nortgages with possession are to them. Of the area sold nearly one third is that of one village bought at the time of Regular Settle-Jegráon: ment by the Raekot family. The average price is smaller than in the Lower Upper Dhaia Dhaia, as the inclusion of the village mentioned above has lowered it. The average mortgage money per acre is Rs. 35, or 33 times the Government demand.

Gerden Walker, B. R. § 304.

Circle.

Seil.	Ares.	Reto.	Resulting assess- meet,	Half esset estimete.
Nids chills Ehdlis chills Rausts god dákhar Bhúr	8,948 3,073 119,495 24,908	Rs. c. 3 12 2 8 1 8 0 12	Rs. 33,555 7,682 1,41,900 18,681	Rs. 87,873 8,456 1,52,784 20,817
Total			2,01,818	2,10,430

The revenue rates sanctioned for this Circle with the results are shown in the margin. The village assessments announced and reported amounted to Rs. 2,01,415, an increase of 20 per cent. on the previous demand.

sessment for the whole District. Gordon Wacker, S. R., § 305.

In the calculations of assessment all agricultural land has been included General re- whether hable to assessment or not, as it is a cause of great confusion to treat ault of the whether hade to assessment or not, as it is a cause or great confusion to treat Revied As land as a separate class merely because it has been exempted from the payment

		Revenue (Rhalea and Jagir).									
Tahril,		former.	New.	Increese with per- ceetage,	Rate of none obsessment on caltivation.						
Samrála	441	Ra. 2,61,871	Rs. 3,08,580	Rs. 46,715	Rs. a. p. 2 1 5						
Ludhiáca	•••	4,30,281	5,11,852	81,571	1 7 10						
Jagráce	**	2,83,525	2,71,477	37,03z 16	136						
Total	•••	0,25 677	10,91,915	1,66,238 18	I 8 5						

of revenue. Therevenue rates are thus applied to all cultivation; but from the results a deduction must be made on account of much or revenue free land. The marginal statement gives a comparison between the jama of the last year of the of old, and of the first year of the new Settlement after this deduction.

The appointment of zaildars to be paid by a deduction of one per cent. from the revenuo was sanctioned over the greater part of the district, and minor deductions were also made from the full assessment on account of land under gardens and for crops injured by trees growing along the main roads. Besides this, where the period of 20 years during which land irrigated from

	Khálsa and tion paid b		Actual
Taheil,	Farmer,	New.	iocrease.
Samråla Ludhiát a Jográou	Hs. 2,15,564 3,52,556 2,27,091	Rs. 2,48,043 4,05,789 2,59,566	Rs. 33,379 53,233 31,575
Total	7,96,111	0,14,298	1,18,187

new wolls are protected from cultancement had not expired, a deduction from the full assessment for the remainder of that period was made. The jayirdars, too, take a large share of the increase, and the marginal statement shows the actual immediate increase to the Government revenue.

HIANA DISTRICT.

PART A.

Thus the net actual gain to Government was Rs. 1,18,187, and this will ncreased by about Rs. 6,000 when the well leases have all expired. to the jágirders was Rs. 25,391 immediate, and Rs. 25,974 after the ry of the well leases, that is, tho net gain to them after deduction of the mutation payable to Government and included in the above statement.

Land Revenue.

General re-

Cessos.	Regnlar Settlement.	Settlement.
l rate ol rict post l dri bardar	Rs. a, p 1 0 0 3 2 0 5 0 0	Re. c. p. 8 5 4 1 0 0 0 8 0 1 0 0 3 2 0 5 0 0
otal	9 2 0	18 15 4

The statement in the margin shows Revised Asthe cesses paid at the Regular Settle- sessments for ment and now at the rates per cent. on the revenue. The cesses were left as they were found in 1880, except for Walker, S. R., the addition of the district post cesses, which had before been omitted.

The Sutley used to form the northern boundary of the district, l riverain villages settled their boundaries by the deep stream e. During the cold weather of 1903-04, however, an Assistant nmissioner was put on special duty to lay down a fixed indary along the Sutlej, and a fruitful source of dispute and gation has thus been removed.

Inside villages the customs vary a good deal. In some it is rule for the co-sharers to make up the annual losses of suffering rers from village common or from land held in severalty; and this case new land becomes village common as a matter of course. where the custom is that of fixed fields, according to the Settlent map, each proprietor bearing his own losses, and being entitled land that reappears on the site of his fields, only such area as been recovered beyond the original limits of the village becomvillage common.

As to occupancy tenants there is no clearly defined rule; but eir claim to recover their rights in land reappearing after diluvion generally recognized (a) when they hold a share of the village, they generally do; (b) when the rule is that of fixed fields and proprietor from whom they hold recovers his ownership.

An account of the old riverain custom will be found in the st edition of this Gazetteer, pages 96 and 97. It is now of only an tiquarian interest as regards village boundaries.

Some account has already been given in Section C, Chapter I, pages 66 to 80 the principal jagirdirs of the district. The Malaudh family, which alone oy shalf of the whole jagir income of the district, had established itself under e empire. The others are mostly the descendants of the petty chiefs or afederacies who, on the downfall of the Delhi empire at the close of the century, partitioned the country between them, and came under our election in 1809 as described in Chapter I, B. page 21. These chiefs and conleracies were at that time virtually independent, though it is probable that, t for our interference, they would all have been eventually absorbed by

Jágír assign. ments of re-Walker, S. R.

LUDHIANA DISTRICT.

CHAP. III, C. Land

Jigir assignments of revenue.

:Revenue.

their more powerful neighbours. A few of the jagir families, again, have been from the first dependent, having originally had an assignment of a few villages made them by some one of the more important chiefs (e.g., Kapurthala and Nábha), and being transferred to us in the annexation of 1846. From 1809 till the outbreak of the first Sikh war in 1845 we had little to do with the internal administration of the estates of the jagirdars, who were allowed to govern much in their own way; but at the close of the Sutlej campaign in 1846 a great change was effected in the status of all but the seven important cis-Sutlej chiefs, who were maintained in the full enjoyment of that virtual independence which is allowed to protected States. (1) All villages not belonging to the seven accepted chiefs were incorporated in our territory along with what we had acquired by conquest and confiscation from Lahore, Nabha, &c.; but even after this we exercised but little authority within the estates of the jugirdars, for we only abolished the transit duties and deprived them of their police jurisdiction in the first instance. When, however, the second Sikh war was followed by the annexation of the whole of the Punjab, their power was still further cartailed; and, finally, about 1850, it was decided to substitute for their hitherto undefined exactions from the people a fixed cash revenue demand. This last measure, when carried out, reduced all jágirdárs alike to the position of mere assignees of Government revenue; and it was a great blow to most of them. They had considered themselves as lords of the soil; and it does not appear that their rights over the land were at all inferior to those of the zamindure of Bengal. The jagirdars had realized from the cultivators a full proprietor's share of the produce, and there was really no limit to their exactions, except the fear of driving away their villagers. To most of the families who had before been independent the jegirs were continued in perpetuity, unless, of courso, they had compromised themselves in the Sikh war and were punished for this by confiscation. The tenures of the others were considered on annexation, and more or less favourable terms were given, some being maintained in whole or in part for the lives of the holders only; and when this course was pursued, subsequent lapses have reduced the villages to the condition of shared. In other cases the original grants were only of a portion of a village.

Oommutstion money paid by jagirdars. Gordon Walker, B. R., § 323.

The chiefs and confederacies had always been liable to pay tribute or furnish levies, or both, to the paramount power; and the contribution had taken the latter form on their coming under our protection. When the final change to a fixed cash assessment was introduced after 1849 it was natural that the irregular demands for which the jagirdars were liable should be replaced by a certain tribute. This in most cases took the form of a contribution at the rate of so much (one to four annas) per rupee of revenue; but for some of the confederacies it was the estimated cost of maintaining a certain number of horsemen or footmen. In Ladhrán and most of the small jagirs the rate of commutation is two or four annas per rupee of revenue; while in Malaudh it is two annas, except in the branch of Sardár Mit Singh, in whose favour a reduction was made to one anna on account of services performed in the Mutiny. As an example of the second form of payment, and the solitary instance in the district of the istamrari tenure, the case of the village of Lalton may be mentioned. This is held by the descendants of a Garcwal Jat, called Chaudhri Gahnda, subject to a fixed payment of Rs. 1,100 per annum, and the cost of maintaining four horsemen at Rs. 16 each per mensetn, i.e., Rs. 768 per annum. For the collection of the commutation money in some of the minor japirs, where the shares are much subdivided, the head of the family has been appointed sarkarda or headman, and receives a percentage deduction from the amount which he pays into the Government treasury for the whole jagir.

⁽¹⁾ See Griffin's "Rajús," where the proclamation of the Government of India on the subject is given in cetento.

Jágirdárs.

PART A.

The jugirdars, besides enjoying the revenues of their villages, will be found in many cases to hold in absolute ownership a considerable area of land. This is usually the bir or waste land reserved by the ancestors of the form.

Revenue.

Land owned
These birs have, with the exception of one or two in the Malaudh pargana, been by jagindars.

Order on.

Gorden.

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Gorden.

Gorden. jagırdare. The land of absconding cultivators was also considered as belonging to the chief, and the Malaudh Sardars acquired a considerable amount of landed property in this way just after the introduction of the cash demand of the Regular Settlement.

CHAP. III. C.

The following abstract statement gives details as to the jágirs Statement of jágirs. existing in the district in 1903-04:-

The same of the same of the same of

			ž	DMBER OF VILLAGES,	SR ()¥ V.	(EEEA	OKS.		Revenus of jäskide in nopres.	or jags	riddr 13	nopeh	,	S	SERVICE COMMUTATION IN RUPEES	DXNO:	TATION	IN RU	数数	,
		-	*	Tholo.			Total.	تا	Subjec	Sudject to service commutation of	• commt	tation	001410			44				Total,	1
.llaneT	Jdgir.	Nama of Idgirddr.	.Tladividually.	In partnership	ln part.	Whole.	i In part.	Total.	One nans.	ввана отТ.	Fort onnos.	Lang sam.	Zot sabject to s. Lucitatuminos	Total.	One ann.	Two annas.	Four anna.	Lucyp sum.	"IntoT	os bieg ed oT Junmarsvod	To be paid to
'TNYIII	Malaudh Pakhoko Ber Khosa Bágrián	S. Badan Singh S. Sundar Singh S. Balwart Singh Guvbukbh Singh Bhi Aran Singh Bhi Aran Singh	865444		61 11 21	!!!	:::00:	: : : -	15,711 7,701 3 3,663	30,160 14,216 18,508 3,362	111:11	::::::	 1,286	45,010 22,037 18,508 4,036 4,048 1,848	986 487 229	3,772 1,784 2,319 420	11111	::::::	4.75. 1.27. 1.27. 1.25. 1.30. 1.30. 1.30.	4 a y 7 a y 82 a a a 1 a a a a 1 a a a a	11111
rad	Hans Milliary	Singh, &c. Diál Singh, &c. S. B. Rám Singh Subá- dár-Major	:: "	::::		<u> </u>	9 H G		; : : ਅਜ ਦ	::::	::::	 *,835	2,377 300 3,831	2,377 300 8,656	:: :	:: :	::::	1,728		1,728	:: :
	Total	Total Tabsíl Ludlisána	[5]		101	<u> </u>	7415	18	327,195	68,125	;	4,835	7,781	1,07,9±2	1,702	8,519	<u> </u>	1,738	ere'r	01,919	:
*XO	Jagraen Tabell Mise, petty	Misc, petty jugirs	"	:	8		80	101	:	:	:	:	3FG'T	4,015	:		<u>' '</u> :	:	:	:	:
ya.		Total Tahsil Jagraon	হয়	:	80		8	01	:	:	:	:	4,915	4,915	:	i	:	:	:	:	:
	Tota	Total of the District .	110		12	211	7.15	3	27,105	1,18,489	2,601	7,180	18,030	1,73,510	1,702	14,815	650	2,080	19,256,19,102	9,102	151

* Those number 7. + See Government of India Resclution No. 867 B., dated 27th February 1993, 'regarding the grant of assignments of land revenue to deserving Native Officers. Land Revenue. Statement of jágírs. The second of th

The second of th

Anaih	Distriot.] Assi	gned Rev	enue.		[Part	211 : A.
Total,	*,estor of feth	126,815	42,548	15,483	184,846	CH III La Reve
To	esongazza 10 tedanM.	1,713	1,183	1,271	4,167	Mu
B TERM OF MENT.	*seron in serk	1,650	472	1,026	3,148	
During the term of Spitlement,	Number of seagnees.	403	140	307	918	
AT PLEASURE OF GOVERNMENT.	* Leros ai serA,	1,560	800	334	2,694	or in part.'
AT PERA GOVERN	Nomber to redmoM.	276	82	82	879	for whole
OR LIVES.	*,esroa ai 491Å	5,313	623	741	6,549	# i, s., tho 'area of which the revonue is anigned for whole of in part."
For LIFE OR LIVES.	. Мошрег об якзіgцева.	2,13	123	422	498	the reyonde
ITY SUBJECT	*.89172 ul so1A	4,468	3,720	1,055	9,240	es of which
In Period To Cond	Rumber of essigness,	481	320	252	1,063	, e., tho 'ar
Hædd in pereptier. Head in pereptiers sudject without conditions, to conditions,	•, seros ai serA	113,824	37,488	11,891	143,206	
Heed in P	Mamber of assigness.	282	650	618	1,660	
		i	:	:	:	
	Name of Taheil	•	:	•	Tota of District	
	Kar Kar	Ludbiáns	Samrála	Jagráon	Tota (

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PART A.

From 1st April 1905 the district is to be divided into two tracts, (1) an urban (Ludhiána town alone being so classed) and (2) the rural area, the latter including all places in which Sikh or Hindu Jats predominate. In the rural area the contracts will be leased at a fixed fee of 6 pies a gallon to the contractors of 1904, on condition that they sell pure proof figuer at Rs. 6 per gallon. All the liquor-shops within a radius of 5 miles of Ludhiána are to be closed, and those on the roads within a radius of 11 or 12 miles are to be transferred to places off the read.

Local and Municipal.

There is only one shop for the vend of foreign liquor, which is Liquor other situated in the Chanca Bazar in Laddiana town. The license spirit. fee for this shop for the year 1903-4 was Rs. 1,232.

Cultivation of the poppy is prohibited in this district. Opium is imported from Málwa, Ambála, Simla and Shúhpur.

Opium.

Hemp is not grown in this district and charas is imported from the Hoshiappur and Amritsar Districts. In 41 of the 70 shops for the yend of hemp drugs the sale of charas is to be prohibited from the 1st April 1905, and only thang will be allowed to be sold.

Drage,

Under the old system assessees with incomes below Rs. 1,000 Income Tax. always predominated largely, forming nearly 75 per cent of the 43 of Part B. total number, and only one assessee in fifteen was assessed on an income above Rs. 2,000. From 1890-1 to 1901-2 the assessments showed a steady increase, and the demand rose from Rs. 27,379 to Rs. 45,480, and as finally fixed was realised with very little difficulty. Warrants only averaged 30 to 40 annually, while distraint sales never exceeded 4 or 5. Money-lenders, grain-dealers and speculators are the principal assessees—persons whose incomes must from the nature of things vary considerably from year to year. The exemption of incomes below Rs. 1,000 reduced the number of assessees from 1,802 in 1902-3 to 698 in 1903-4 and the annual revenue from Rs. 43,231 to Rs. 28,676. To a certain extent the Land Alienation Act is said to have affected the incomes of moneylenders.

Arms licenses are sparingly issued in this district, and their number is being gradually reduced. In 1895 there was a large reduction from 352 to 254. In 1897, however, they rose again to 309, but have steadily decreased since then. In 1903 there were 227, 11 of those being for swords.

Section E.—Local and Municipal.

The District Board, which is under the ex-officio Chairmanship of the Deputy Commissioner, should consist of 117 members, Board Fands. 25 nominated by Government, 53 elected to the Local Boards with Part B. the right of also sitting on the District Board, and 39 co-opted by these original members. In point of fact this number has never been reached, and in 1903-4 the Board consisted of 7

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Section F.—Public Works.

The district is in the Jullundur Division of the Buildings and Roads Branch, P. W. D. An account of the distribution of the roads of the district between the P. W. D. and the District Board has been given in Chapter II, Section G, and of the dam at Aligarh in Chapter II, Section A (Irrigation). The only work of first rate importance in the district is the Ludhiana open drainage system. Commenced in 1890, this work was handed over to the Municipal Committee of the town in 1892, but the schome has not yet been completed and additions are made to it as funds permit. The water-supply scheme for the town has hung fire for several years. A drainage scheme for Jagraon town has also been prepared.

The District Board pays to Government in the Public Works

Miles. Department a sum of Rs. 15,723 Board public Bamrala-Khanna 10* annually for the maintenance of its Ludhiana-Robara ... 10 motalled roads, other than those Sahnowal-Koharn 21 ... 13 Jagráon-Raikot noted in the margin which it main-*** Kup-Malaudh *** tains by its own agency. On the other hand, the Board maintains most of the Government buildings in the district on the terms laid down in Punjab Govornment Notification No. 1879, dated 20th August 1904.

Section G.—Army.

The only regiment which can be said to be historically connected with the district is the 15th (Ludhiána) Sikh Infantry, but it is not by any means exclusively or even mainly recruited from this district.

The following regiments obtain recruits from the district:-

2nd Lancers (Gardner's Horso); 18th Duke of Connaught's Lancers. Bombay Regiments:-

32nd Lancers, formerly the 2nd Bombay Lancers.

33rd Queen's Own Light Cavalry (old 3rd Bombay L. C.), 36th Incol's Horse (old 6th Bombay Cavalry).

37th Lancers (Baluch Borse), (old 7th Bombay Lancers).

Hyderabad Contingent Regiments:-

25th Deccan Horse (old 1st Lancers).

29th (old 2nd) Lancers (Deccan Horse).

3rd Lancers.

30th (old 4th) Lancers (Gordon's Horse).

Mountain Batteries :-

27th (Gujist), 28th (Lahore), 24th (Hazara), 25th (Quotta), 26th Jacob's (Jullandur) and 22nd (Derajat).

Now completed.

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F. F. C.

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PART A.

the Eastern Circ	ele under t	he Deputy	Inspector	r-General at Lahore, and is divided into
	Total	Distri	oution.	11 thánás, 8 of the 1st class, viz.,
Class of Police.	strangth.	Standing guards.	Protection nod detection.	Ludhiána, Jagráon, Raikot, Dehlon,
District Imperiol Municipal	301 117	29	362 117	Sahnewál, Khanna, Máchiwára and Ludhiána city, and
Total	508	29	470	3 of the 2nd class,

and is divided into thánás, 8 of Police and - the 1st class, viz., Ludhiána, Jagráon, Raikot, Dehlon, Sahnewal, Khanna, Part B. Máchiwára and Ludhiana city, and 3 of the 2nd class, viz., Shehna, Dákha

. Jagraou is the largest, most unwieldy and and Samrála. most populous thông in the district. Jagraon, Dákha and Raikot are the only Police stations whose areas lie in two Tahsils, viz., Ludhiána and Jagráon.

The Police duties of Ludhiana town are performed by the regular forco: Jagraon has a Municipal Police force of one 1st, one 2nd and two 3rd grade Sorgeants and 40 constables; and Khanna a mixed force of Polico and town watchmen, consisting of a 3rd grade Sergeant and a constable, with 10 watchmen.

In all the other towns and in the villages there are chaukidars. one or more according to the number of the population: while in some cases two or three small villages form a single charge. The chaukidars, who number 999, are paid in the villages Rs. 36 per annum, which is collected by a rate on the houses, and disbursed by the Tahsildars. In the towns (except Bahlelpur) they get Rs. 4 a month, the jamadars recoiving Rs. 6, and are paid from Municipal Funds.

The principal crimes of the district are burglaries and thefts, both of property and cattle. Dakaities sometimes occur, but are more frequent on the main roads than in private houses.

The following stations have a cattle-pound attached to them Dákha, Jagráon, Raikot, Shehna, Dehlon, Khanna, Sahnewal and Máchhiwúra.

There are 15 Police posts at intervals along the Ferozepore Police posts.

1. Lodhiáns l'ario, j 2. Ohnaki Awal, 3. Sanet. Baddowal.

Karimpura.

Panohar. Dháka

9. Mor Karima. 10. Man. 11. Sidbran, 12. Aligarh.

13. Parão Jagrãon. 14. Knieráv. 15. Ghálib.

road, all those on the Ambala and Samrála roads having been All are patrolled by removed throe constables, two from sunsot to midnight and one

from midnight to morning. A

1st class outpost is also maintained at Bhaini Ala in Samrála Tahsíl, and Hárni guards at Bodalwála, Tappar, Kirri and Bir, all near Jagraon, and Burj Lambra in Ludhiana thana.

Trackers are not employed, as cattle-lifting is not a normal crime of the district, but the Baurias would probably make good trackers,

III. H. Working of Police.

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 gang robbers by hereditary profession" submitted in 1849 to the Government of India.

At one time the Bauria class was a source of great annoyance to travellers and cultivators in the district. Their chief occupation was dacoity, burglary and stealing grain and crops. Those who were unable to abandon their criminal avocations have sought other fields for their occupation by emigration, whilst those who are still in the district, beyond petty pilfering, are not troublesome.

Police and Baurins.

The Gonemárs are now no longer proclaimed under the Act. The Sánsis and Gonemárs were settled by Rájá Fateh Singh of Kapúrthala in six small villages of Jagráon and Ludhiána where they own the land; and the others have now fixed residences in a few villages; but it is evident that all four tribes were originally gipsies, foreign to the country, and that for generations they wandered about committing petty thefts, begging, and living as they could. It appears impossible to break them of their habits. Where confined to villages, they are a pest to their neighbours, and the crops adjoining their lands require constant watching. They are very poor cultivators themselves. The Harnis possess a slang, of which the following words are specimens:-

Nakhar, 'theft,' Bhasri lagana, 'to commit burglary,' Khara, 'any Government official, Kutba, 'a constable or stranger,' Katera, 'a Jat,' Poh, 'to bury,' Cnetra, 'rupees,' Tilkin, 'shoes,' Dhotin, 'a woman,' Tuke, 'clothes,' and Khaot, 'a lock.'

Dogars and Gujars are specially addicted to burglary and cattle-lifting.

Members of the Siálkot Pakhiwáros have lately been found in the towns of Jagraon, Ludhiana and Machhiwara. Statistics are being prepared regarding Dogars and Pakhiwaras with a view to their inclusion among the oriminal tribes.

The District Jail at headquarters is capable of holding 325 prisoners and is used for short-sentence convicts. The health of Part B. the jail is good. The death-rate in 1903 was only 10.03 per mille in the jail as against 53.15 outside it. No case of plague has occurred in it, and a quarantine camp is maintained where every prisoner spends a fortnight before he is admitted to the jail. The iail industries present no unusual features. Country paper is made and supplied to the local Courts, and lithographed forms are also printed for local use. Oil-pressing is carried on in country mills. Mustard-seed is used for pressing and the oil is sold to other jails for prison diet. Country cloth, blankets and mats are made for the use of prisoners and the mats, which are made of muni, are sometimes sold in the open market. The profit of jail-industries amounted in 1903 to Rs. 3,692, or Rs. 17-1 per head. The cost of keeping the prisoner was Rs. 57 per head.

CHAP. m i Education and Literacy.

Literacy.

Part D.

Section I .- Education and Literacy.

The literacy of the people of Ludhilian is above the averagea fact which must be attributed largely to the exertions of the Preshyterian Mission. The advance in this direction during the Table to of 20 years 1881-1901 was remarkable. In 1881 the proportion of literates per mille was 45 among males and 1 among females. In 1901 it was 63 among males and 4 among females. Of the small community of Native Christians nearly half can read and write. Next come doing with 515 per mills, then Hindus with 63. Sikhs with 53, and lastly Muhammadans with 20.

Education. 62 of Part B,

The script in common use is the Lande, in which the ordinary Tallets and banja keeps his accounts. In the towns well-to-do merchants use the improved Lande known as the Ashráfi. Some Hindu Jats use Gurmukhi, and Brahmans use Nigri for religious purposes, The Persian character is little used. Advertisements and signhourds in English are quite common in Ludhiana town. The number of indigenous schools in the district loss decreased pari possu with the growth of the Government schools. The remarks made by Mr. Gordon Walker in the Settlement Report still hold good. He says: -

Gordon

"Indigenous schools in Muhammadan villages are mader the charge of watter 8, n. n mullish or priest, who gives instruction in the Korán to a class of 8 or 10 pupils scated in the village merque or takin. The school is called a making. The boys merely learn by total from the unster two or three chapters; but to this is cometimes added a little writing on rlate, and partions of rome ency Urdu book (the "Knrima," "Khalikhari," &c.); and it is only in this case perhaps that the institution can rightly be called a school. The mullah, who is also the village priest, has generally a small piece of land given him, or receives an allowance of grain, and also presents at cold times. Lande is taught to bays of the shopkeeping class in the villeges by a pada or master.

> "The boys learn to write on a clate, there being of course no broks, as the character is purely commercial. Fees are paid by the parents, ite, I when a boy enters, another rapeo when he can write the letters, and so on. Gurmuklii is tought in the dharmealne by the eidh, who is probably in possession of an endowment, and also receive presents from the parents. The instruction here ton is by slates, the boy first learning to form the letters and to write from dietation. An advanced boy will sometimes begin to read the Granth or Sikh Scriptures, but the use of books has not you been introduced. These schools are, it will be sean, of the most elementary character,"

Privato Balicols. Publito Schools.

Thore were 86 private and 16 aided indigenous schools in the district in 1904. A technical Anglo-Vertineular School was

Haddonfil. 8belna. Jagraon. Sawaildi. Ralpur. Raikot. Samrála, Babukwil Gujarmát (2). Khanna Machhiwarn. | Malaudh.

opened at Indhisina in 1896 and promises to do well. There are 18 Middle Schools in the district at the places nated in the margin.

Quint will has a Middle School for girls as well as one for boys.

The following list gives the places where the primary and zamindári schools are located:—

CHAP. III. I. Education

and Literacy.

Primsry and Zamíndári Schools,

		1						=
Berial No.	Locality,	Serial Ro.		L	eality.			
ial		ig						
Ror		Ser						
_	,	_						_
	PRIMARY (BOYS). District Board Schools.	2 3	Jandikli. Chima.					
	District Bourd Benoois.	4	Rahusean.					
1	Lalton,	5	Karpálon.					
2	Dakha.	G 7	Bihdla.					
4	Palhowdl, Qila Hans,	8	Rumi. Fatchpur.					
5	Jassanedl.	1 9	Mohi					
6	Kum Kalán.	l l	_					
7	Kat Gongu Rai.	1,	F	RIMA	er (Gr	Cabasi	_	
8	Paddi. Jaspál Banger,	(a.)	Man	terpas	Board	BCN001	Α,	
10	Gill.	1.5	Ludhiána	***	***	***		5
11	Dhálkot,	6.7	Jagraon	410	410	111	***	.2
	Pohir.	6.9	Raikot	405	***	***		2
13 14	Butahri. Narangudi.	10	Khanaa	***	***	***	***	
îs	Mansuran.			Pr	MARY,			
16	Bhutna,	1	Raipar,					
17	Kaisar,	2	Norangwal.					
18	Jamalpur,	3	Ramgarh.					
19 20	Latdla. Bholapur.	5	Tihára. Andio.					
21	Andlu.	G	Basian.					
22	Dehlon.		NEW PRI	71RY	School	R TO R	E MAIN	
23	Rimgerh.		TAINED BY					
24 25	Bagrian. Hiran		TO DE		CED DI	Dirti	BICT .	
26	I Dauguer.			В	OARDS,			
27	-Nombran.			Boys	' Schoo	le,		
28	Hultur.	1 2	Baliawál. Manki.					
29 30	Talwandi Rái. Halwaru.	3	Mattowara.					
31	Mollah.	4	Thrike.					
32	Kaonki.	6	Mullaapar.					
33	Tihdra.	6	Shanker. Kulahar.					
34 35	Raqba. Hans (Jagraon).	8	Nathowal.					
36	Bussian	l õ	Akhara,					
37	Sidhienn Bet.	10	Sadbar,	.,				
38	Nasrali.	11	Sidhwan Ka Galib Kalár					
39 40	Kheri. Sarwarpur.	12	Poawat,	4.				
41	Salundi,	14	Panjgirálu.					
42		15	Nagra.					
43	Bhari.	16	Dhiromazra	١.				
44 45	Bhadla. Ladhrán.	17 18	Isrů, Mauppur,					
46		19	Lalori Kalá	D.				
47	Kolalo.	1						
48	Dahrra.	İ		Girl	' Bcho	ois.		
49	Ikolaha,	1	Baddowsl.					
	Zamindari (Boys).	1 2	Sanohwal.					
	District Board Schools.) 8	Lalton.					
_	g. 1.	4	Máchhiwár					
1	Chaoki.	5	Sidhwan Be	ot.				

OHAP. III. I. Education and Literacy.

Female

Education.

In the indigenous achools the girls generally receive instruction along with the boys, more or less of their own age, in malticle of all sorts, but respectable Muhammadous, who observe pendah, do act allow their girls to attend. In their case the mullify goes to the parents' house to teach the Korán, Nimis, Pakki Reta, des, es, as long as the girl is a minor she goes to the wall this house, where she receives similar in truction from his wife or some other nonze of the house. Women do not as a rule attend the multiple more to the mullify house. They receive instruction of a similar kind from educated members of their own family if may such that he. It may, however, be noticed that Missionary ladies, both active and European, go about in the towns and villages, and offer to teach a little reading, writing and arithmetic to women of respeciable households, and the people for quently accept their frieadly help.

The North India Female Medical School has been mentioned above (p. 95). It has a staff of reachers capable of preparing lady students to become hospital resistants, companishers, midwives and nurses. There were 43 students in attendance in 1904. It is hoped that the Medical School ere long may be able to do full duty as a Medical College for women.

There are one Middle and 16 Primary Schools for girls. At Ludhiana there is a Government High School and two native Middle Schools, the Arya and the Isbiana, and two Mission High Schools.

Ludhisan Uigh School,

The Government High School was started as a private vermentar seminary in 1864, at the instance, and with the aid of certain leading members of the Hindu and Muhammadan comunities of Ludhiana, who felt it a desideratum, since there was no institution where recular education could be obtained, and many objected to send their children to the Mission School, where religious instruction was (as it now is) compalsory. This private seminary in 1865 became a Government grant-in-nid school, and was created n purely Government High Vernacular School in 1870. In 1875 English was introduced in it, which wrought a thorough change in its character, that is from a high vernacular school it was transformed into a High District School like those of Delhi, Lahore, Amritsar, &c., with a vornacular department attached A drawing class was also added. The school house, which was built in 185?, was soon found to be too small for the school, and additional accommodation had to be remed until 1893, when four new class-rooms were built. Two more class-rooms were built in 1903. The school has a bourding-house attached to it, and a new one has new (1904) been built. The Municipal Committee has borne the cost of all these additions. The strength of the school was in 1904: High Department 92, Middle 73, Special Classes 66 and Primary 168total 899. The average strongth during the five years, 1899-1904, has been 331. There are 76 hourders-49 Hindus and 17 Muhammadans and 10 Sikhs. The staff consists of a headmaster with 18

assistants, of whom 10 are English speaking. The school is well spoken of by the Government Inspector, and is making steady progress despite the keen competition of the other High Schools in the city.

CHAP. III. I. Education Literacy.

The City High School for boys was established by the Mission in 1834 and soveral branches have since been opened in the city. The number of scholars at present (1904) is 332, including 112 in the Primary Department. The staff consists of 15 teachers who, with the exception of the Principal, dovoto themselves entirely to scholastic work.

Ludhiána High School.

A Christian Boys' Boarding School, established at Lahoro in Christian 1875, was transforred to Ludhiana in 1877. It was susponded in Boys' Boarding School. 1880 but re-opened in 1883. Extensive buildings have been erected at a cost of Rs. 40,000. The number of boarders at present is 93, of whom 47 are in the Primary Department.

The establishment of a Christian Boys' Boarding School at Allahabad has drawn off the boys who used to come to Ludbiána from the United Provinces. In the last two years, however, the number in the High Dopartment has increased from 38 to 46. The annual cost of the City School is about Rs. 10,000 and that of the Boarding School about Rs. 12,000. The City School pays its way with the help of the Government grant. The Boarding School costs the Mission some Rs. 7,000 annually. The Mission supports two girls' schools in the city-one for Hindús and one for Muhammadans—and also two summer schools at Jagraon and Morinda (in Ambala District) for low-casto girls. There is also a Christian summer training-school at Khanna, where a few young men are trained for evangelical work.

The expenditure on education in this district cannot be esti- Expenditure mated with accuracy owing to the combined educational, inedical on Mission Schools Eduand ovangolical work done by the Mission. District Funds, how-cation. over, spent Rs. 28,700 in 1903-4 and Municipal Funds Rs. 32,600. Government grants came to Rs. 3,800.

The district forms part of the Jullundur Circle.

Printing,

Since the time when a Mission Press was set up in the Danish Settlement of Scrampore and became important, both in its commercial and educational results, the printing pross has been a favourite instrument in the hands of Christian Missionaries. The Ludbiana Mission printing and book-binding establishment turns out work of unusual excellence and finish. The vornacular type and Roman-Urdu books printed here, as well as the book-binding, received high commendation at the Punjab Exhibition of 1881-82, The Ludhiana Mission Press does not advertise largely like the Methodist Episcopal Press of Lucknow, and has not produced so popular a book as the chorp Roman-Urdu Dictionary of that, CHAP. 111. J. Medical. establishment, which is sold extensively in the Punjab, confining itself apparently to work of a none strictly religious character; but it takes a high place for good workm auchip and neatness.

Printing Presses. The Ludhiana Mission Press has already been [described in Chapter I.

The Civil and Military News Press was established by Khwija Ghulam Mohi-nd-din in 1892. The special work of this Press is printing and publishing Drill and Regulation backs for the Native Army in Imlia and abroad. It is patronized by the Military Department of the Government of India, which purchases large quantities of the books, &c., printed in Urdu, Hindi, and Gurmukhi by this Press. It also publishes a newspaper in Urdu, called the Civil and Military News, which has a weekly circulation of about 1,300 copies.

The Narankari Press is a lithographic press, which does job work in vernacular, and is owned by Rikhi Ram. It is now closed for want of work.

The Hathkiri Press is also a lithographic press, which does job work in Urdu. It was established in 1899. Since June 1903 it has published two weekly newspapers, called the Public and Fauji Akhbir. The weekly circulation of the former is 200 and of the latter 60 copies. Proprietor: Natha Itil.

The Ahmedi Press now prints nothing.

The Kaiser-i-Hind Press is a lithographic press and his published a vermoular journal in Urdu, called the Khadam-i-Tijar, since 1900.

The Haqqini Press is a lithographic press. It publishes a monthly religious pamphlet in Urdn, colled the Núcou -ala-Núr. Circulation about 100 copies. Proprietor: Manlyi Núr Muhammad.

The Army News Press, opened in June last, publishes a vernacular newspaper in Urdn, called the Army News, Subscribers about 800.

Section J .- Medical.

Hosplinis & Dispensation. Table 62 of Part B.

The Civil Surgron has under him a well-appointed Civil Hospital at headquarters with a disponsary, and a branch dispensary in the city which was opened in 1899. There are seven outlying disponsaries at Jagraen, Machhiwara, Raikot, Khanna, Deblon and Malaudh. A travelling disponsary was given up in 1899, and the Kohara disponsary, built with that at Deblon in 1897-98, chosed in April 1903, an indoor ward being added to the Deblon disponsary in its stead. The disponsary ut Malandh was built in 1904-05 at the cost of Siriar Badam Singh, o.e., the expenditure being close on Rs. 4,000. The Sirdar has also munificently endowed it with a sum of Rs. 20,000.

The Civil Hospital which was founded in 1853 is situated to the south-east of the city near the Jail. It has 40 beds, 25 in the male ward and 15 in the female. During the five years Medical 1898-1902, a yearly average of SaS in-patients were treated. The Civil Respita opening of a branch dispensary in the city has greatly relieved the and Branch pressure on the Sadr dispensary. In 1898, before the branch was Ludbidge. opened, nearly 50,000 out-patients were treated at the Sadr. In 1902 less than 19,000 came to the Sadr while 27,000 were treated at the City Branch.

CHAP.

Taking the District as whole for the five years 1898—1902 wo find that the yearly average of in-patients treated is 1,225, ontpatients 102,643, and operations performed 4,615.

The income of the medical institutions of the District comes to some Rs. 15,000 (4) annually. Municipal Funds contributing practically and District Board Funds & Subscriptions and other sources of income bring in only Ils. 750.

Income,

The annual expenditure is kept within the amount received. Expenditure. Salaries account for half the expenditure and repairs to buildings, &c., for a quarter. Medicines, diet and other expenses make up the rest.

Charlotto

The Charlotte Hospital and the dispensary of the Ludhiana Charlet Zonána and Medical Mission are superintended by qualified lady doctors. The dispensity was opened in May 1881 and the Hospital in February 1889. There are two Branch Dispensaries, one in the village of Gill, 5 miles from Ladhiana, the other in Phillaur on the other side of the Satlei.

The Charlotte Hospital consists of one large ward and two small ones-total 80 heds-and an operating room. There are quarters for the matron and nurses. The total expenditure in the year 1902 (exclusive of missionaries' salaries) was Rs. 7,047-1-3.

There is also a Medical School for Christian women and a Jubileo Memorial Hospital in connection with it, which provides clinical teaching. This hospital was opened in 1899 and contains 70 bods. Since its foundation the number of patients both in-door and out-door has increased yearly.

The hospital is not complete as yet but additional land has been purchased and now buildings are contemplated. A building grant has also been applied for from the Government. In 1902 the figures were :-

In-patients	***		***		*11	058
Out-patients	***	***	***	•••	***	16,800
Operations	148	214	***	***	141	362

CHAP. XII. J. Mcdical. Charlotte Heapital. The total number of prices and a during the year ending November 1902 is as follow:-

Charlotte Hospital and Play where, this in particular Do. the Dopenius of Holping Holping 10,088 analysis as 2,115 a

Giving a total of 15,550 exclusive of the Phillage dispensive where 881 out-patients were treated during the year.

All classes of nomen att not the disp nearing, and though the hulk of the hospital patients come from the moreor classe, or to a large number of pardah women and high caste Hindus avail themselves of its help. Some of the women come from long distances and even from the neighbouring Native States.

During the winder reason of 1901-02 plague camps were opened in Gill, Bulara and Ludhiana.

The hospital is supported chiefly by voluntary subscriptions and partly by a grant from the Municipal Funds of Rs. 40 a month and Rs. 200 a year from the District Fund.

Yacrinalien.

The Vaccination Act is not in force in any of the fowns of this District.

Cent of De-

The expenditure of the Vaccination Staff in 1992-05, including salaries, came to Rs. 2,566. During the five years ending 1999 an average of 28 per · ille was successfully vaccinated yearly. In 1902 the total number of operations performed was 17,558 of which 15,449 were primary operations. The people are comparatively willing to subunt their children to primary vaccination, but rarely consent to its repetition.

The Vaccination Staff is only employed on vaccination from October to April. In the hot weather they are employed in locking after rural sanitation, and in cholera work should such arise.

"Village sanitation in this District" writes the Civil Surgeon in 1904, "is in a very primitive state and is likely to remain so for a long time to come. The low standard or comfort with which even the better classes are satisfied, is a bar to any improvement in this respect."

The sale of quinine in villages realised Rs. 2-5-6 during the year 1902-03. When this figure is compared with the number of deaths from fover which occurred in that year it will be seen to what extent the people are propared to avail themselves of European medicines when these are brought to their door.

CHAPTER IV.—PLACES OF INTEREST.

BAHLOLPUR.

Bahlolpur is situated in Samrála Tahsil, on the ridge over the Budha nala, 7 miles east of Machhiwara and 27 from Ludhiana. It was founded in the reign of the emperor Akbar by Bahlol Khán of interest. and Bahádur Khán, Afgháns (Kháuzáda), whose descendants still reside and own land in the village area attached to the town, but have sunk into obscurity. It is now a place of no importance and has all the appearances of decay, though, when there was a brisk trade on the river which it overlooked, the town must have been flourishing. Its population, 3,369 in 1868, 1 ad fallen to 2,418 in 1891 and 2,194 in 1901. And the Deputy Commissioner wrote in 1881:—"The steady decay of the place may be attributed to two causes—the first is that during the Sikh rule a number of Patháns of Bahlolpur served in the Rijwárs, and brought wealth and plunder to the place; but since our rule these men have given up service and have been living on their sayings; the second the health of this town is very bad on account of the large jhil formed by the Budha udla close under its walls. The municipality was abolished in 1884. The trade, principally in sugar (khand), is insignificant. A good many resident money-lenders in the town (Khatris and Banias) have dealings with the people of the Bet. The town is very unhealthy, like Michhiwara, from its situation. There are a number of old tombs, relies of its former prosperity, in and about the town. These include the maghara of Husain Khán, a brick tomb built in the time of Akbar and still in fair order; the magbara of Nawib Bahadur Khan, son of Husain Khan, 100 yards north of his tomb: the magbara of Aliwil Khan, Suba of the Dekkan, built in the time of Shih Jahin, situated south-east of and close to the town: the tomb of Dand Khau, Resaldar, built in the time of Shih Jahan, now in utter rain, and used for storing produce: the mosque and magbara of Kamal-ud-din Khan, built in the time of Shah Jahan and in perfect order: the khangah of Abd-ur-Rahmán Khán and Sháh Jamál, a brick tomb, built about 7 years ago: the bungalow of Namdar Khanwak, built in the time of Shah Jahan, by Namdar Khan, and in perfect order: the masiid Bilwánwáli, a brick mosque, built by Kámdár Khán in the time of Shah Jahan, in good order and in the possession of Fateh Khan.

HATUP.

Hatur, or Arhatpur, is a village 34 miles south-west of " Mater. Ludhiána. Here Mahívíra is said to have performed char-mansaor a four months' recess in the time of Kanakh-Khetu Rájá. It' was then called Aichata Nagri (see 14th and 15th chapters of the Dharmkhata). General Cunningham says that Arhatpur was certainly Badhaur, but Arhatpur is doubtless named from Mahayira, the Jaina Tirthankar or Arhat. Old coins and remains

CHAP IV. Places Bahlolpur,

Places of interest.

are found. See Ch. L. B., p. 14 above, where Arura is identified with the ancient Ahiebetti.

Halur.

Hann also per a soun maphara of Rai Finerwille, near the villege, which the people say was built in the time of Hunriyan. The help of Hunryste living in the villages, are in person but of the buildings. Other of Hunryste are the Armat Khan in the time of Shah Jebin, but now district the Nikka-Mahaile math, partly in rain, and known to have been both in the time of Hunriyan, the idgal, one mile teathswe t of the village, a very old building built of breke the Backband to Khanwili carefid, a brick me que of the time of Akkar read the marfid of Backband to Khanwili carefid, a brick me que of the time of Akkar read the marfid of Backband to Khanwili, a transit bradt me que in the village, said to be 300 years old.

Jackson Tarril

Jagráon Taliait Tabsil of the Ludhana District, Punjah, lying on the such hank of the Sutlej between 39–35 and 30–36 N, and 75–22 and 75–47 E., with an area of 417 square miles. It is bounded on the east and south by Patiala and Koth States. Its population was 184,765 in 1901 as against 166,252 in 1891. It contains the towns of Jagraou (18,750), the tabsil head-quarters, and Haikot (19,131) and 169 villages, and the land revenue, including cosses, amounted in 1902-05 to Rs. 3,19,959. The but helickle of Aliavil 13 in this tabsil.

Jactaon Town.

Japráon Town

Jugaion, a municipal town and the head-quarters of the Tabeil of that name, lies 24 miles west of landhiana, on the Landhaana-Ferozepore metalled road and about 11 miles south of it. It is the second town in importance in the District, and had in 1901 a population of 18,760 souls (9,776 males and 8,984 femoles), but most of the people live in the suburbs, called agences, which are really ordinary villages, each with a large area of land attached to it, and inhabited by the same classes as other villages. In the town proper the houses are nearly all of masonry, and many of these belonging to the mercantile community are very line buildings, soveral storoys high. Owing to the flatness of the surrounding country the lown can be seen from a great distance on all sides, and has a very imposing appearance. The streets are fairly straight and wide for a native town, and are well paved. The situation is most healthy, being well removed from the river; and the climate, though very hot at times, is dry and sulabrious. The town is of no antiquity. It is said that more than 200 years ago under Rni Kalha, a Muhammadan fagir called Lape Shah, took up his abode on the site of the present town, and prophesied that a city would be built there, the streets of which he marked out us they now run. Rai Kalha called in cultivators from all parts, Gujars, Arifus and Jats, and assigned them lands round the site according to the number of each tribe; he also settled a moreautile community, whose dwellings he enclosed with a wall, while the agricultural population settled down each tribe on a site in their own hand outside the town. The outlying sites were

Places

enclosed with the usual hedges (war), whence the designation of CHAP. IV. the suburbs, from \acute{ag} (forward or outer) and $w\acute{ar}$. The town was named after a Rajput Jigra, who exerted himself in promoting its of interest growth and who was probably the Rai's representative. The small tomh of Lape Shah stands in the centre of the town and every Town. Thursday there is a mela or celebration in his honour, in which Hindús and Muhammadans alike take part. About two miles north of Jagraon, on the west of the Sidhwan road, is a mound of some dimensions called Solah, marking the site of an old village on which the agreers and adjacent villages of Sherpur, &c., are said to have arisen. It was here that in 1802 A.D. the young Rai Alias met his death in the hunting field. Under the ranis who succeeded him, Ahmad Gijar, the thánadár, or local representative of the family, tried to assert his independence, but was expelled with the assistance of Patiála. As related elsewhere, in 1806-8 Mahárája Ranjít Singh stripped the ránis of their possessions; and the country about Jagraon passed into the hands of the Ahlúwalia (Kapurthala) chief, under whom the town became the head-quarters of the ilaga or territory and the mud fort of the Rais was improved. The town came into our possession with the rest of the country in 1846, and the fort was demolished; but the town walls still remain.

The town has a very considerable trade, being situated at the head of the great grain-producing Jangal tract. There is a large manufactures. colony of the mercantile class, mostly Khatris of the Beri, Lumba, Maria and Jaidke gôts, who have money-lending dealings with the villagers about; and a great deal of grain finds its way into the bázár in small amounts when the cultivator has not enough to make a journey to Ludhiána worth while. These driblets collect in the granaries of the trading classes, and are kept till they can be disposed of at a profit. The town was once famous for its large granaries; but great losses occurred in consequence of the contents of these rotting, and the grain is now stored in small flat-roofed rooms. Merchants from Ludhiána buy on the spot from the local traders, or the latter bring the grain to Ludhiána. The opening of the new line of railway to Ferozepore, with a station at Jagraon, will probably divert much of the grain trade from Ludhiana. There is a very large sale of brass and copper dishes, and of cloth in the bazar; and it may be said that the whole country for 30 or 40 miles to the south and west is supplied from here, the Jats coming from long distances to purchase. The chief transactions are in clothes of the better sort, such as are used on marriage and other festive occasions, gold embroidery, &c. The main street (chauk) is generally thronged with buyers particularly at the wedding season (May-June); and it is not uncommon for a well-to-do Jat to spend Rs. 200 or 300 in hard cash in a purchase of clothes. There are 15 or 20 shops of thathiars, or workers in brass, where the usual dishes are made from the sheets of the metals; and there is also all import of ready-made goods of this

Places of interest Jazráon

Town.

CHAP IV. class from Delhi, Jagidhri, he., for sub-at the ordinary shops, The brass dishes made at Jagrain are famous throughout the country. and fetch high prices. It has also a considerable trade in iten and a few workers in ivory or brane, who make bought, and boxes, &c. The hangles are used at every Hindu marriage. These are also considerable dealings in gold of which a great deal is purchased by dats for boughs and other ormanents. The assess of Jagraon have a great to putation for selling the east I pare.

Public Inatitulions,

The Paleil buildings are on the Ferezepore road, with encamping ground and racit, about a mile from the town, but consected with it by a good metalled road. The buildings isolute a toom for European officers. The Police station is inside the town, in the building where the representative of the Aldawilla chief used to reside. The town has an Anglo-Vernaraber Middle School, and two girls' schools. Hindu and Mulamurchen, supported from manicipal funds. There is also a 2nd class disperante instanting l from the same source. The family of Manh vi Right Al: have some fine houses, and also a gorden with tembs and a mesque in it adjoining them. The Beris, Landocs, &c., here also some substitutial edifices; and Devi Chand Beri has ever if he the accommodation of travellers a large cacif at great exceptse just outside the principal gate, that towards landholes. The old wall of the town is in good repair, and there are two large polla tanks outside. Besides the rest-house in the Tabell the ole a Public Works Department rest-house on the Landhahaa-Penagepore road and a Canal rest-house at Aklima; both me about 2 miles from the town. All these are furnished.

The administrative officers include a Tabelldar, a Note-Talisfidar, a Deputy Inspector of Police and a sub-registrar. Two horse and two donker stallions are kept by the District Board in the Taleil.

Jugason is a second che - manicipality with a committee of thoughters. consisting of 1 ex-officio, 2 nominated and 6 elected members. (Panjah Gott. Nota. No. 687, dated 28th Sept. 1886). The average municipal meene for the 10 years ending 1902-03 was R., 18,208, and the average expenditure Rs. 92,505. The chief items of income and expenditure for 1992-03 were ng follows:---

to totoli in the same	-		n 48
Income.	Pr.	Krpemhiere,	1 Bs.
tictrol	18,631 8,611 863 7,565	Advibilitation Public calcity Vablic health and convenience Contributions Public instruction Uthers	4,70% 1,758 0,425 126 3,519 662
Tolal	26.016	Total	17,526

The municipal boundaries were fixed by Panjab Govi, Nom, Nos. 583,dated 28th Sept. 1886, and 718, dated 24th Sept. 1888. 1:s rules of business will be found in the Punjab Gazette for March 1887, p. 284 of

PART, A.

Part III and Notn. No. 43, dated 3rd Aug. 1893. (Ml. Manual, pp. 357-8). OHAP. IV. Octroi limits were defined by Punjab Govt. Notn. No. 479, dated 1st July 1890, and the schedule, prescribed by Note. No. S22, dated 5th July 1876, was of interest. revised in 1897 (Notn. No. 581, dated 4th Decr. as corrected by Nos. 301, dated 1st July 1899, and 253, dated 16th June 1900). Building bye-laws will be found in the Punjab Gazetto for Jan. 1888, p. 70 of Part III; and penal bye-laws were sanctioned by Notu. No. 371, dated 3rd Jano 1890. In the case of latter the model rules were adopted. (Ml. Manual, pp. 450-1).

Khanna.

Khanna.

Khanna is a small municipal town in Tabsil Samrala on the North-Western Railway, 26 miles south-east of Ludhiána. population increased from 3,408 in 1868 to 3,988 in 1881 (17 per cent.), but in 1901 had fallen to 3,838 (2,016 males and 1,822 females). It has no particular history, but in Sikh times was the scat of ono of the petty chiefs among whom the country was divided. The last representative of the race was Mai Daian Kaur, on whose death in 1850 the large jagir of the family lapsed. The family had a masonry fort, mostly demolished now, but of which portions still remain. Since the opening of the railway in 1870 Khanna has increased in importance, and there is a rising trade in grain and cotton (oxports); salt, iron, &c. (imports). The railway station is a good one, and large consignments of grain come up from Nabha and other territories to the south. There is at present no good road to the south, and most of the trude comes on camels, donkeys, &c. The town is very healthy; and has good clean bazars, very wide for a nativo town. The houses are unprotentious, being mostly of one storey, and many of sun-dried bricks only; and there is not much actual wealth in the place as yet. A large portion of the population is agricultural. There is a Police station outside the town at the encamping ground, and a Vernacular Middle School. The only objects of interest are the ruins of the old fort, and of an imperial sarai built in the time of Aurangzob, in which a part of the town is built; also a baoli of brick, dry and in ruins, built by Mai Daian Kaur, now in possession of Government, but not looked after.

Khanna is a second class municipality with a committee of 9 members. 1 ex-officio, 2 nominated and 6 elected. (Punjab Govt. Notn. No. 687, dated 28th Sept. 1886). The average municipal income for the 10 years ending 1902-3 was Rs. 6,404, and the average expenditure Rs. 6,131. Tho chief items of income and expenditure in 1902-3 were as follows :-

Income.	Hs.	Expendituro.	Rs.
Octrol	3,056 831 876 110	Administration	1,069 752 3 187 1,663 7
Total	5,781	'Total	6,678

Places of interest.

The numerical boundaries were fixed by Punjab Govt. Nota. No. 683, dated 28th Sept. 1886. Its rules of husiness will be found in the Punjah [Garette for March 1887, p. 281 of Part III, and No. 43, dated 3rd Aug. 1893. (Ml. Manual, pages 557-8). Octrol limits were defined by Punjah Govt. Nota. No. 470, dated 1st July 1870, and the schedule was pre-cribed in Nota. No. 822, dated 5th July 1876. Building bye-laws were sanctioned in Punjah Govette, Part III, p. 70, dated 26th Jan. 1888; and penal bye-laws by Nota. No. 371, dated 3rd June 1890. Ju the case of the latter the model rules were adopted. (Ml. Manual, pp. 450-1).

LUDHIANA TABSIL.

Ludhiana Tahafi, Tahsil of the Ludhána District, Punjah, lying on the south bank of the Sutlej between 30° 31′ and 31° 1′ N. and 75° 36′ and 76° 9′ E., with an area of 623 square miles. Its population was 333,337 in 1901 as against 823,700 in 1891. The town of Ludhiána is the tahsil head-quarters. It contains 432 villages, and the land revenue, including cesses, amounted in 1902-03 to Rs. 5,18,122.

LUDDIANA TORN.

Ludbilna Town: position. Ludhiana, the principal town and the head-quarters of the District, is situated on the ridgo just over the Budha nala, or former bed of the Sutlej, about 6 miles from the present course; and lies on the North-Western Railway, and the Grand Trank Road (Delhi to Lahore), 116 tniles from Lahore. It is also connected with Ferozepore by a metalled road 72 miles in length. Population in 1901 was 40,649 souls (26,829 males and 21,820 fomales). Of these 498 were enumerated in civil lines.

History under n a b i v e rala.

The town was founded in the time of the Lodi emperors, on the site of a village called Mirhota, the date recorded being 898 Hijri (A. D. 1481). The founders were Yusaf Khan and Nilang Khán Lodis, or perhaps the latter alone; and there is no reason to doubt the generally accepted account that Landhiana is a corruption of Locilian. The situation selected was a slight emineuce on the south bink of the Sutlej, commanding the passage of the river, on the high road from Central Asia to India. The history of the town is in a great measure that of the District, and will be found in Sec. B of Chap. I. Under the Lodis it was the seat of government for this part of the empire, and a large fort was built on the site of the present one by Jakil Khan, grandson of Nihang Khan. The Mughals fixed the heal-quarters of the earkar, or division of the province (anh) at Sirhind, and Ludhiana was only a malaila or district; but it did not lose its importance; and, to judge from what are said to have been the boundaries of the Lodis' city, it must have had a population of 5,000 or 6,000. Neither did it suffer from the Durini invasions, although, as already noticed, Nadir Shah is said to have ordered a general massacre of the people. On the downfall of the Mughal empire it praced quietly into the hands of the Rais about the year 1760; and under them enjoyed the same mersure of prosperity as before. Bai Kalha

¹⁰ Met l'entreprofet to em Takel betre than to any older subficilien,

improved the fort, and it was one of the thanas under the rule CHAP. IV of this family. Maharaja Ranjit Singh took it with the rest of the country from Raini Bhag Bhari in 1806, and gave it to his uncle, Interest. Rája Bhág Singh of Jínd. When Sir D. Ochterlouy advanced to the Sutlej in 1809, land was allotted to us for a cantonment to Town. the west of the town; but we held nothing else till 1835,(1) when, on the death of Raja Sangat Singh, the town and country about became our own possessions (See Chap. I. B., pp. 15 to 22, for details of the above sketch).

When the town was transferred to us it appears to have Mistery waoccupied the space between the fort and ridge over the lowlands (which latter was the boundary on two sides), and the present Chaura Bázár up to the Sabzimandi, and on from that the Hazári Sark. The present Municipal Hall and the tomb of Pir Roshan (3) are situated outside the old limits on the west; but to the east of this the houses covered the whole of the unoccupied space between the fort and the present town. No record can be found of the estimated population of that time. The old imperial road entered the town on the eastern side, where the houses of the American Mission sottlement now stand; and the residency was also on this side while the cantonneuts lay to the west, the present civil station being the remnants of them. Under Sir Claude Wade (1823-38) and his successors the town increased in size and importance, spreading out to the southwards. It became the centre of a very extensive trade in grain, sugar, cloth, &c., which found its way down the Sutlej in heats from Phillaur. There had always been a small colony of Kashmiri weavers in the town, but in 1833 A.D. a famino in Kashmir drovo numbers of this class all over the country, and some 1,500 to 2,000 of them were settled in this town, and started in trade by the exertions of Sir C. Wade. In 1842, on our withdrawal from Cahul, the family of the Amír Shuja-nl-Mulk, with a numerous body of adherents and attendants, came with as; and Ludhiana, then a frontier station. was fixed on as their residence. They at first took up their abode on the west side of the city; but soon after shifted to the south side, where the land on which their houses and gardons now stand was assigned to them. When after the Sutlej campaign the Ludhinna District was formed, the civil offices were removed to the cuntonment side of the town, and in 1854-5 the Grand Trank Road was metalled and realigned to its present position. In 1854 tho cantonments were abandoned, a small force being retained as a garrison of the fort; but this change does not appear to have much affected the town, which, with the improved communications, was becoming more important every year as a centre of trade. The ovents of the Mutiny have been related in Chap. I, Sec. B., pp. 25-19. The

⁽³⁾ Although the town was not nominally ours till 1835, the Political Agents oppour to hare exercised paramount influence in it from the first, and many of the improvements effected in it date from before 1835. (3) "Fir Abdul Qadir Jalan!" (see para, 64 of the Bellement Report by T. Gordon Walker),

Places of interest.

V. The municipal boundaries were fixed by Punjab Govt. Notn. No. 683, dated 28th Sept. 1886. Its rules of business will be found in the Punjab [Gazette for March 1887, p. 284 of Part III, and No. 43, dated 3rd Aug. 1898. (Ml. Manual, pages 357-8). Octroi limits were defined by Punjab Govt. Notn. No. 479, dated 1st July 1890, and the schedule was prescribed in Notn. No. 822, dated 5th July 1876. Building bye-laws were sanctioned in Punjab Gazette, Part III, p. 70, dated 26th Jan. 1888; and penal bye-laws by Notn. No. 371, dated 3rd Juno 1890. In the case of the

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Ludhiána

CHAP. IV. houses of the town at that time came to within a short distance Places of of the fort, and, when the garrison mutined, it was found to be in communication with the town-people just outside it—Súfis, Súds, Gújars, &c. Mr. Ricketts, on the departure of the mutineers. ordered the domolition of all the houses within a radius of 200 or 300 yards of the fort, the inhabitants settling down where they could. The Gujars were removed to their lands below the town; the Safis took up their abode in the vicinity of the Cantonment Bázár, where they now live; and the Súds and others spread themselves over the town. The opening of the railway from Delhi to Lahore in 1870 gave a great stimulus to its trade and a number of shops and saráis were built along the Grand Trunk Road, facing the station.

General description of the town.

The town is situated in an angle of the ridge or high bank, which to the east of it runs due north and south and then turns westward, forming the boundary on two sides. The houses are mostly built of masonry. In the old part, the limits of which have been described above, they rise storey over storey, and are crowded together, while the streets and lanes are narrow and tortuous. But the new town to the south of the Chaura Bazar bears all the marks of being modern. The streets are wide and straight, and the houses and shops mostly of one pattern. The principal streets, the Chaura Bázár and the Hazúri Sark, were designed by Sir C. Wade himself; and one of his projects, the Iqbal Ganj, is a standing proof that he was rather too sanguine about the speedy development of the town for which he did so much. His successors, Assistant Agents and Deputy Commissioners, have each added something-e.g., the Murray Gonj (Captain Murray), Ghalla Mandi, or grain market (Captain Larkins), and the Kaisar Ganj. In the old parts of the town, such as the Naugarah square, the houses are many storeys high, but in the new town they are generally, as yet, of only one, though some of the people along the Chaura Bázár have added a second. The old town was divided into mahallas according to tribes (Súds, Súfis, Sayyids, &c.); but these have mostly been lost sight of. Attached o the town is a large area, owned principally by Sayyids, Gújars and Aráins, most of whom reside within the town limits or in the old military bázár, and this land is divided into eight tarafs.

From the situation of the town over the lowlands and the swamps along the Budha nala one would expect malarious fever to prevail after the rains, and in somo years, such as 1878, there has been a tremendous loss of life from this cause, the half-starved Kashmiris and others of the lower classes not having sufficient stamma to resist the attacks of the disease. Between 6 and 7 per cent of the whole population died from fever alone in that year (1878), and the death-rate, which had averaged 83 in the preceding five years, rose to 111. But at other times the town cannot be said to be unhealthy, the sanitary arrangements are good for a

Indian town, and the system of drainage appears to be now efficiency. cient. Inspection reports since 1878 speak well of Ludhiána, which was before considered to be very backward in this respect. The Interest. supply of drinking water is from wells inside the town, the Ludhiana quality being apparently very bad on analysis; but it is said that Town. it has evil effects only on new comers. The average death-rate does not compare unfavourably with that of most Punjab towns.

The principal educational institutions are the Municipal High Pablic build-School, the Primary School, the Mission School, and a Hindu Aided attentions. School. There are only two regular printing presses, one belonging to the American Mission Society, which publishes a weekly journal called Núr Afshán, and the Dharm Sahaik Press maintained in connection with the Hindu School above mentioned. The principal public buildings and offices are the Municipal Hall, the Post Office, Dak Bungalow, Kotwali or Police Station, Tahsil and Telegraph offices, which all lie near the entrance of the Chanra Bázár, just outside the town to the west, and the Railway station. Across the railway line, which separates it from the town, at a distance of about a quarter of a mile, is the District office or Kacheri, while beyond this lie the church, the cemetery, and the few houses of the European district staff. To the north of the town the fort is situated on a point of the ridge overlooking the lowlands. It is a square structure with a high mud wall and a deep ditch, the inside measuring about 100 yards each way; and it owes its present form to Sir D. Ochterlony, who made use of the bricks found in the neighbouring ruins of Sunet for building it. The principal streets of the town are the Chaura Bázár, which runs east and west the whole length of the town, the Bazázán, Pansári, Lucha and Lakar Bázárs, Wade Ganj, Hazúri Sark; and the squares or market-places are the Ghalla Mandi, Kaisar Ganj, and others belonging to private persons. It is in these last squares and market-places that most of the dealings in the grain trade inside the town go on. There is always a great deal of business in the Chaura Bazar, where cloth, shoes, &c., are hawked about; and of an afternoon it is crowded with people along the whole length. There are two or three sardis along the Grand Trunk Road, facing the Railway station, in which grain is stored, those of Ali Muhammad of Jhajjar, Kanahia Lal, &c. Outside the town to the south lie the houses and gardens of Shahzada and the other refugees; and beside them are the Jail and Dispensary, while the Mission Settlement is situated further on at the south-east corner.

The principal places of interest have been mentioned in the preceding paragraph. To the west of the Railway and behind the interest. district offices is a rakh, or plantation, under the District Board. This is traversed by roads in all directions lined with ornamental gardening. The rakh is a great place of resort as a drive for the Europeans and rich natives; but all classes of the town and country people frequent it. The old cantonment has completely disappeared,

Objects of

LUDHIANA DISTRICT.

Interest. Ludhiooa Town.

CHAP. IV. except such houses as have been kept for the European residents, Places of and a few offices close to the town, and the church and cemetery. The marks of the compounds are visible in places, but most of the land occupied by the old lines is now under cultivation. There are few antiquities in or around the town. The tomb of Pir Abdul Qádir Jaláni has already been referred to. This is in the open space to the south of the fort. There is also au old tomb in the Saiad's mahalla of one of their ancestors (Saiad Ali Fil Mast), to which is attached a grant of land, and several Hindu temples (Shiyalas and Thákardawáras) of recent date. The mound of Sunet lies about three miles west of the town.

> Ludhiána is a second class municipality with a committee of 24 members, consisting of the Deputy Commissioner, Civil Surgeon and 3 ex-officio, 5 nominated and 16 elected. (Pb. Govt. Notn. No. 687, dated 28th Sept. 1886).

> The average municipal income for the ten years ending 1902-3 was Rs. 92,831 and the average expenditure Rs. 92,565. The chief items of income and expenditure for 1902-3 were as follows:-

Income.	Ru,	Expendituro,	Rs.
Octroi	72,779 319 14,180 7,745 3,228 98,196	Administration	15,010 14,553 44,155 21,118 1,800 6,878

The municipal boundaries were fixed by Punjab Govt. Notas. No. 683, dated 28th Sept. 1886 No. 713, dated 24th Sept. 1888, and No. 95, dated 24th Febr. 1902 (extending Section E. Its rules of business will be found in the Punjab Gazette for 10th March 1887, p. 284 of Part III; also Notus. No. 43, dated 3rd Aug. 1898 and No. 21, dated 3rd Aug. 1899. (Ml. Manual, pp. 357-8). Octroi limits were defined by Punjab Govt. Notn. No. 479, dated 1st July 1890, and the schedule, prescribed by Notn. No. 822, dated 5th July 1876, was revised in 1887 and 1899 (Notns. No. 110, dated 11th March 1887 and No. 330, dated 5th July 1899). Building bye-laws were sanctioned by Punjab Gazette, Part III, p. 70, dated 26th Jany. 1888; and penal bye-laws by Notn. No. 370, dated 3rd June 1890. In the case of the latter the model rules were adopted (Ml. Manual, pp. 450-51).

In and about the town lie a few old Muhammadan remains: these are the Shaikhonwali masjid and tomb, near the fort. The mosque, which has two minarets and three domes, was built in the time of Aurangzeb: the khángah of Sulimán Sháh Chishti, a square domeless tomb, probably never finished: the khángah of Saiyid Ali Sarmast, two tombs and a mosque in an enclosure. One tomb is octagonal and underneath is a tahkhánah. The second tomb, according to an inscription, was built in 978 H., 1570 A.D. The first tomb was probably built in the time of the Tughlags: the khingah of Shah Qutb, west of the road to Phillaur, known to

[PART A.

have been standing for the last 600 years. The walls of the enclosure and the payoment are evidently of bricks from Sunet: the places of khángah of Saiyid Ali Buzarg, a brick tomb, said to have been Interest built 300 years ago.

Масипичава.

The municipal town of Máchliwára (in Tahsíl Samrála) lies on Máchliwára, the ridge over the Budha Nála, 20 miles east of Ludhiána, on the old Rupar Road. A metalled road connects it with Samrála, the Tahsíl headquarters, whence there is also a metalled road to Ludhiána; and although the distance is 26 miles, all traffic goes round this way.

The town had in 1901 a population of 5,588 souls (3,027) males and 2,561 females), of which a large portion is agricultural, tho village area being 4,800 acres. Máchhiwára may have existed in Hindu times, as a place of the name is mentioned in the Mahabharat; but it is doubtful if it can claim greater antiquity than that allowed by the account that it was founded 800 years ago under the Ghorian dynasty, like Ludhiana, on the south bank of the Sutloj. The name means "the place of fishers," and is common all along the river. It was under the Ghori dynasty that the Rajputs first settled in this part of the country. The town has a considerable trade in sugar, the rab of the Bet coming into it for manufacture into khand or burn (a coarse brown sugar). Some account of this trade will be found in the Note on Sugar appended to the Settlement Report, and Mr. Gordon Walker estimated the annual value of the exports of sugar and syrup at 1 to 11 lakhs of rupoes. There is a considerable commercial element, composed of Khatris, Banias, and Suds, ongaged in money-lending business with the villagers about, principally with the Muhammadans of the Bet. The sugar trade is mostly carried on by the Khatris, who combine it with money-londing, taking payment in rab, which they refine into khand, &c. The streets are good, well paved, and clean. The public institutions are a Police Station, a Dispensary and an Anglo-Vernaenlar Middlo School. As in Ludhiana there is a terrible amount of sickness in the antumn, and for two months most of the inhabitants suffer from fever. Under the Sikhs it was the headquarters of the Sodhis; and they have left a large brick fort, now partly occupied by the Polico Station and a Diwankhana or Court.

Near the town are a few old buildings which include the Sujan Sháhwáli masjid built in the time of Muhammad Sháh by the ancestors of Saiyid Qásim Ali; the mosque of Miln Ali Sháh or Qázi masjid of stone, built in the time of Sikandar Ledi, 923 H., 1517 A. D., by the lady Fath Malik, and still in uso: the Ganj-i-Sháhídán or place of martyrs, west of the town, probably the temb of those who fell in the battle of Máchbiwára in 1555 A. D.: the Diwáli

the town.

CHAP. IV. Devi, Bhadr Káli, a brick temple, a mile west of the town, built 90 Places of years ago. About a mile west of the town are the remains of an old mosque which was built of blocks of kankar. Round about it Interest. are many ruined graves, and the ground is covered with romains of Máchbiwára. buildings. . Many of the bricks are of large dimensions, showing great age. The people point to a well which contains a now plain stone, which they say once bore an inscription that the man who sank it had previously sank 360 wells in Machhiwara. There are some five wells to the west of the town in the sand, all built of large bricks. Hence it may be inferred that the town formerly extended towards the west. Gurndwara, a brick Sikh temple built 100 years ago by Sodhi Karm Singh, to commemorate a visit of Gurú Gobind Singh to this place. It is in the possession of a resident Akáli. The palace of the Sodhis of Machhiwara, now an utter ruin, is close to the Police rest-house at the west end of

Máchhiwára is a second class municipality with a committee of 9 members, 1 ex-officio, 2 nominated and 6 elected (Punjab Govt. Notn. No. 697, dated 28th Sept. 1886). The average municipal income for the ton years ending 1902-3 was Rs. 4,928 and the average expenditure Rs. 4,922. The chief tems of income and expenditure for 1902-3 were as follows:—

Івсолю,	Rs.	Expendituro,	Rs.
Octroi	3,030 601 570 1,009	Administration	868 765 3,074 951 31
Total	5,270	Total	5,689

Malandh.

The muincipal boundaries were fixed by Punjab Govt, Notu. No. 683, dated 28th Sept. 1886. Its rules of business will be found in the Punjab Gazette for 10th March 1887, p. 284 of Part III, and Notu. No. 43, dated 3rd Angt. 1898. (Ml. Manual, pp. 357-8). Octroi limits were defined by Punjab Govt. Notu. No. 479, dated 1st July 1890, and the schedule, prescribed by Notu. No. 1106 S., dated 26th Augt. 1885, was revised in 1887 (Notu. No. 201, dated 29th April). Building bye-laws will be found in the Punjab Gazette for Jan. 1888, p. 70 of Part III, and penal bye-laws were sacctioned by Notu. No. 371, dated 3rd June 1890. In the case of the latter the model rules were adopted. (Ml. Manual, pp. 450-1).

MALAUDH.

Malaudh, the residence of one of the branches of the family of the Malaudh Sardárs, which derives its name from the place, has a small trading community and a good bázár. Population (1901) 1,915.

MEGHAN.

Meghan.

Meghán, 4 miles south of Khanna, contains a grove of trees and a tomb. The grove is held in high esteem by the natives, who Railet.

PART A.

will not cut down a tree. Tho tomb has been in existence for over CHAPIV. 100 years. Other groves lio 6 miles north of Khanna and 5 miles west of that town.

Places of Interest.

PIR MUBARAK.

Pir Mubirak, 8 miles south of Khanna, a grove of trees and Pir Mubaa brick tomb.

RAHAWAN.

Rahawan contains a masjid of brick, built by the ancestors of Rahawan the headmen of the place in the time of Shah Jahan.

Raikot.

RAIKOT.

The municipal town of Raikot is situated in the Jagrion Tahsil, 24 miles by the direct read south-west of Ludhiana, with which it is connected by the metalled road to Dhika on the Ludhiana-Ferozopore road. Its distance from Ludhiana by this road is 27 miles. Raikot had in 1901 a population of 10,131 sonls (5,185 males and 4,946 females); but is not a place of very great importance. Of the population about our-half is agricultural, as there is a very large village area (nearly 8,000 acres) attached to it. This land was cultivated from of old, being divided between six villages; but 230 years ago (so says the family history) Rai Ahmad, moving from Talwardi, the former seat of the family, made the place the head quarters of his territory, and called it Raikot. The scattered villages were collected into one town, and a trading community assembled. The followers of the Rais would of themselves have heen a large addition to the population of any place, as they must always have maintained a large army. Raikot declined in importance on the everthrow of the Rais; but there is still a certain amount of local trade carried on by the Khatri, Bhibra, &c., residents. This is principally in grain from the villages to the south, tho agriculturists taking in return clothes, brass dishes, salt, &c. The population remained stationary; and there are no signs that the place is developing, although the situation should give it the command of the trade from the Jangal, which at present goes straight through to Ludhiana. A good road towards Sahna would probably make some difference. The town has, like dagraion, an Anglo-Vernacular Middle School, a Polico Station, and a third class dispensary. The town is surrounded by a brick wall, ruinous in parts. The principal places of interest are the palaces of Rais, now in the possession of Imam Bakhsh, the adopted son of the last rani who resides here. Those buildings are mostly dilapidated.

Raikot is a second class municipality with a committee of 9 members, 3 nominated and 6 elected, (Punjub Govt. Notu. No. 087, dated 28th Sopt. 1886). The average municipal income for the ten years ending 1902-3 was

CHAP. IV. Rs. 6,805, and the average expenditure Rs. 6,472. The chief items of income and expenditure for 1902-3 were as follows:—

· Incomo,	Rs,	Expenditure,	Rs.
Octroi	5,010	Administration	1,122 697
Municipal property and powers	1,565	Public health and convenience	4,659 180
Grants and contributions	915	Public instruction Others	1,091 465
Others	750	,,, ,,, ,,,	
Total	8,270	Total	8,814

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RAIPUR.

Raipur.

Raipur, 11 miles south of Ludhiána, is the chief village of the Garewal Jats, who wielded some local authority at the close of the 18th century. The houses are almost all built of burnt bricks. The population is mostly agricultural; but there are a good many shops in the bázár. The village has 12 headmen Population (1901) 4,416.

SAHNA.

Sahna.

Sahna, the headquarters of a Police Station, 54 miles southwest of Ludhiána, is the largest of the Jangal villages, and the original seat of the Malaudh family, who have a large fort in it. Its inhabitants are almost all agriculturists, and the houses are of sun-dried bricks. The bázár contains a few ordinary shops. The village had 17 headmen. Population (1901) 4,469.

SAHNEWAL.

Sahnewal,

Sahnewal, a station on the North-Western Railway, 9 miles south-east of Ludhiána. A good bázár is springing up. Population (1901) 2,422.

SAMBALA TARSIL.

Samrála Tabsil. Samrala Tahsil of the Ludhiana Distirict, Punjab, lying on the south bank of the Sutlej between 80° 37' and 30° 59' N and 76° 2' and 76° 24' E., with an area of 291 square miles. Its population was 154,995 in 1901 as against 158,770 in 1891. It contains the towns

PART A.

of Khanna (3,838) and Múchhiwára (5,588) and 263 villages, among CHAP. IV which is Samrale, the tabsil headquarters. The land revenue, including cesses, amounted in 1902-03 to Rs. 3,56,750.

Places of intorest.

SARAI LASHKARI KHAN.

Sarái Lashkari Khan, 8 miles west of Khanna, a brick sarái Barái Lashsimilar to that at Khanna, built in the time of Aurangzeb Alamgír. kari Khan. It is still in use, and is in possession of Government, by whom a chaukidar is entertained.

THARL.

Tihara has already been described in Chap. I. It is situated Tihara. in the north-west extremity of the district on the high bank over the Sutlej, 27 miles west of Ludhiána. Its present inhabitants are tho ordinary agricultural and miscellaneous population (2,609 souls in 1901) of five or six villages (called tarafs), who are collected together in a common site like the people of the agwirs of Jagraon. It has also a fair bazar with a number of shops. The old town has long sinco disappeared in the river and no traces of it remain.

The village contains a magbara of Shuh Ishqwala, a brick tomb needing repairs to plinth and dome, the latter being in rains. It lies in the common burial-ground and is not looked after. The maqbara of Shah Diwan, a mile west of the villago, is said to have been built in the time of Akbar. It has a grant of 190 bigahs of land attached to it for maintenanco.



APPENDIX I.

WEIGHTS AND MEASURES.

The unit of cloth measure is the girah, the width of the first three Appendix I. fingers, 16 girahs going to the gaz or yard. In the gaz used for pashmina there are said to be only 143 girahs. The gaz is two cubits (hath), i.e., of tength, twice the length from the elbow to the tip of the middle finger.

The scale for weight is as follows:-

No guita viantúci = 1 ter kuchcha. 40 zers Liebelia = 1 maund lacheba.

weight and capacity, Cordon Waller, S. R., § 141,

The mansieri paisa is the old copper coinage of the country. The kacheha scale is used everywhere, and the whole of the grain trade is done in it, even in the shops of Ludhiana no other being used. The kachcha maund is at Ludhiana 17 of our standard sers. It varies slightly through the district, this being a remnant of Sikh times, when every ruler had his own weight. A Jugraon maunel is about four sers (kacheha) less than that of Ludhiann; and one of Pakhowal something smaller still. Weighing is generally done with a 10 seer (kachcha) weight, called dasera, which has a Government stomp on it. Almost every agriculturist has a weighing halance (takri) of his own. A map or earthenware vessel is used in the field for finding out roughly the amount of grain, but in selling, the balance and weights are always used. Milk is sold and lought by the sere; but it is generally measured in a gadica or biass vessel of known capacity. Oil is also rold by weight, and it may be said that measures of especity do not

The measure of area has been the subject of much inquiry and of a Measures of good deal of correspondence. Mr. Gordon Walker thus discusses the subject; area, The competer Akhar fixed one standard bigah for the whole empire, viz., Gordon "The competer Akhar fixed one standard bigah for the whole empire, viz., Walter & R., The emperor Akhar fixed one stamman organ. The chum wn-20 ghattas, each side was a chain. The chum wn-20 ghattas, each 5145.
Thus 3 Hahi anz = 1 ghatta, 20 ghattas = 1 chuin. The digahot The ghatta I do not find mentioned in the Ain Akbari, and I could not Akbar. before account for it. The Hahi gaz was Akbar's standard of linear measurement, and is somewhat has then ours, so that the ghatta is 22 of our yard. The Sikhs introduced their own haad measures, of which mention will be made hereafter. The imperial bigah was restored as the official standard in our settlement of the villages nequired in 1835, and in the whole district in 1850; but the people have not adopted it. They know it very well, but they say that it bears a certain relation to the local measure. There is no connection between gaz or ghatta on which it is built, and the pace on which the people always Iali lack. The nuclent measures of the country are the ghundo and the kachha bigah. The latter is the standard country, of Hindustan or the Cis-Sutlej country, and the former appears to be in use all over the Panjah proper, and it has also partly spread in the Malwah. In the uplands of this district the ghundo is used in the greater part of Jugmon and in the Jungal villages, and the bigah in the rest. In the Bot the ghumae pervails, except in a small piece of country about Matewhrali, The Bot tract was all in the Juliandar Doah at one time, and brought the Punjub measure with it when the river changed its course, the execution mentioned above being caused by Sudha Singh introducing the use of the bigah in the new villages which he founded, so us to have one standard for the whole of his territory. It was not in the power of the rulers to make the people adopt a new measure; but they could fix the slandard of that measure.

Measures of area.

APPENDIX I.

Appendix I.

"The scale of the ghumdo is as follows:-

Measures of the country. 8 Karams, double paces each way=1 mandla.

7 Mandlas = 1 kanal,

8 Kanáls = 1 ghumáo.

"But generally the ghumdo is said to be four kachcha bigahs. A kachcha bigah is 20 karams each way. The karam, however, is a very varying quantity, and it was here that the difference came in. The rulers had constant necessity for using a measure either for the land on which cash rates were charged (zabti) or for kankút appraisement of the crop; and there were in every petty state some persons whose pacing was recognized as the Government standard. The karam would be fixed by the ruler at so many chappas or hand breaths 16 to 18; and the pacing was done to suit this. In the more highly cultivated eastern villages the karam was smaller, and that of the Kheri iláqa, adjoining Ambála, was recognized as 16 chappas, while in Jagráon the karam was 16 chappas. This difference of measures has remained in force, and the kachcha bigah of Jagráon is about two-fifths, while that of Kheri is two-sevenths, or less, of the standard official bigah.

The scale of the kachcha bigah is-

20 karams × 1 karam = 1 kachcha biswah,

20 , × 20 , = 1 kacheha bigah.

"I may say here that we have finally adopted for future uso a kachcha bigah, one-third the old pakka bigah, measured by a chain of 29 karams, the karam being 57 inches, and the chain 95 feet. This is a good average for the district, and fits into the old standard."

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WITH MAPS.

1904.

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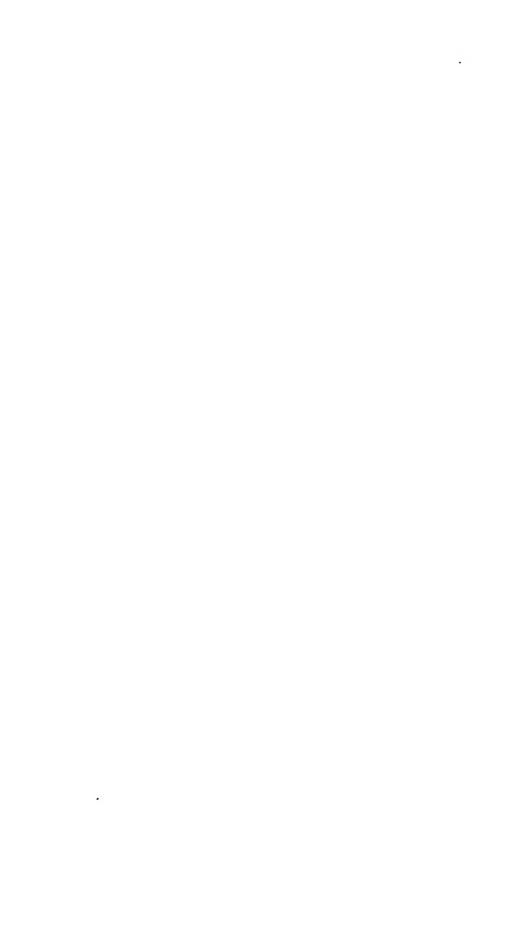


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CHAPTER I-DESCRIPTIVE.

Section A.—Physical Aspect.

The State of Maler Kotla forms a compact wedge of territory CHAP. I.A. which dove-tails into the northern border of the Phulkián States. It is bordered on the north by the Ludbiana Tahsil and District and encircled on the east, south and west by Patiala State territory, the Loht Badi ilaqa of the Nabha State bordering it on the north-Two villages Mánki and Sandaur belonging to the Ludhiána District, lie between this part of Nábha and the State, and the small block of Ludhiána territory called Jandiáli Kalán is just within its northern border. Lying between 30° 24' and 30° 41' N., and 75° 42' and 75° 59' E., the State is 18 miles long by 22 broad, and has an area of 167 square miles, with a population (1901) of 77,506 souls.

The country is a level plain unbroken by a single hill or stream and varied only by sand drifts, which occur in all directions and in some parts assume the shape of regular ridges. The Bhatinda Branch of the Sirhind Canal passes through the northern part of the State, but no irrigation is effected from it owing to the refusal of His Highness the present Nawab, Muhammad Ibrahim Ali Khan, to permit canal irrigation in the State.

The State is badly wooded, whole tracts of cultivation being entirely without trees, except a few stunted kikars here and there. Some barothas and pipals exist round village sites, and the shisham has been planted on road-sides, but the demand for culturable land is too great to admit of trees being planted elsewhere.

There is nothing to note under the head of Geology, as the Geology, etc. State is situated entirely in the alluvium. Geographically, it is part of the adjacent Phulkian States, and its fauna and flora resemble those of the Patiála or Nabha territories, which adjoin it.

The climate of Maler Kotla is dry and healthy, resembling that of the Jangal tract of the Ludhiána District and Barnála Nizámat in Patiála.

At Settlement the average annual rainfall in Maler Kotla was taken at 23 inches (vide Assessment Report, § 4). This amount would be sufficient for agricultural purposes, but the minimum is as low as 10 or 11 inches, which is too little. The soil of Kotla is, however, so retentive of moisture that even a small amount of rainfall produces an average crop, provided it is seasonable. During the 13 years 1891-92 to 1903-04 the average rainfall only amounted to 19 inches annually.

Physical Aspect.

Bainfall.

CHAP. I. B.

Section B.—History.

History.

The founder of the Kotla family at Maler was Sadr-ud-Din, commonly known as the Shaikh Sadr Jahán,(1) a Sarwáni Afghán of Daraband in Khurásán, a very pious man of much celebrity in his time, and a disciple of the Pir Rukn Alam, the Multani, whom he left with the intention of spending his life in seclusion; and, settled at Bhumsi, a place which lay on a tributary(3) of the river Sutlej. Sultan Bahlol Lodi(3) had halted at Bhumsi, when on his way to attack, Delhi, with his Wazir Hamid Khan, when Sadr-ud-Din got into his service. Bahlol had no sooner become king of Delhi than he gave him his daughter Táj Murassa Begam in marriage in 1454 A.D. with, of course, a suitable dowry in a tract of land containing, 12(4) large and 56 small villages. Subsequently the Shaikh contracted a second wealthy marriage in the family of Bahram, the Bhatti chief. of Kapurthala. He died at the age of 71 in 1515 A.D., leaving three sons, Isa, Hasan and Musa by the Lodi princess, and a daugh. ter (6) by the Bhatti lady. The present Maler Kotla family is descended, from Isa, the descendants of Hasan being now merely khalifas or attendants at the shrine of Sadr Jahan. Musa had died without heirs in the lifetime of his father.

The death of Sadr-ud-Din gave rise to a series of disputes among his sons regarding the succession. These might have ended in disaster had it not been for the interference of the Hakim or Subah; of Maler, by whose order a portion of the estate was set aside and. divided among the brothers. Isa, the eldest son, succeeding to the whole of the remainder. Henceforward they had no quarrels about their jagirs. Husan left two sons Sulaiman and Mirza, while Isa left a son, Muhammad Shah, who succeeded his father. One of the sons of Hasan killed the Subah of Maler, and was for this act driven into exile and his estate confiscated. His cousin Muhammad Shah was also involved in this punishment, a fate which threw him into the arms of the Rai of Sunpat. Meanwhile Sher Shah had overthrown Humayun, whereupon Muhammad Shah borrowed a large sum of the Rai and recovered his jagir, by buying over the Subah of Sirhind. He did not, however, allow his cousins to share in it, as they had contributed nothing to the cost of its recovery, and they became dependent on the offerings at the shrine of Sadr Jahan. He died, leaving three sons, of whom Khwaja Maudud, the eldest, succeeded to his father's estate in 1545.

⁽¹⁾ The title Sadr-i-Jahan or Kiza-nl-Kuzat, also called Sadr-nl-Islam, was that of the chief officer of justice at the Delhi Court circa 1300 A.D. 1

chief officer of justice at the Delhi Court circa 1300 A.D. 1

(2) This tributery is still traceable, its course being merked by the terrent which sums between Miler and Kolla efter heavy rain.

(3) Malik Behlol Lodi was a nephew of Sultán Sháh Lodi, who held the gargana of Sirhind in jagir under the Emperors Muberak Sháh and Sayyid Khizr, and succeeded his uncle in that flof E. H. I., V, p. 17.

(4) Maler, Hadiaya, Barasia, Phul, Mahráj, Langowál, Sanghera, Pail, Chamkaur, Amrgarh, Balián and Amich are seld to have been the 12 'large villages.'

(5) The daughter was married in Tobána near Jakhal to a Rájpát family, where her tomb sill saist.

still exists.

his brothers only receiving a few villages for their subsistence, which CHAP. I. E their descendants still possess.

Khwaja Maudud Khan had three sons, the eldest of whom was Fateh Muhammad, who succeeded his father.

Fateh Muhammed Khan left one son, Báyazíd Khan, who was fifth in descent from Sadr Jahan.(1) He was the first to considerably enlarge the family estates, and foun led Kotla near Maler, in 1657. He frequented the Delhi court and received from the Emperor the parganas of Kadrábád and Nangánwa in jágír. He died in 1659, leaving four sons, the eldest of whom, Firoz Khan, succeeded as Rais. Firoz Khan died in 1672. His eldest son, Sher Muhammad Khán, was a prominent general of his time. He served in the Bihar campaign and his services were rewarded by a jagir of 70 villages, one of which, Sherpur, (2) now in the Patiala State, he fortified. He also served in Badaun, aiding the imperial forces to suppress the revolt of Ali Muhammad, the Rohilla. In his days began that incessant warfare with the Sikhs, under the Gurus Tegh Bahadur and Gobind Singh, which endured until quite modern times, and by which the State of Maler Kotla was almost annihilated. Sher Muhammad himself was, however, successful in opposing the rising power of the Sikhs, for he defeated the Gurá Tegh Bahádur at Chamkaur in a desperate fight in which his brother Khizr Khan and Nahar Khan, his nephew. were killed. In this battle the Gurú was captured and sent as a prisoner to Delhi under an escort commanded by Sher Muhammad's son, Ghulam Hussain. The sons of the Gurú also were all captured on this occasion (except one who escaped to Bágrián, where he died of his wounds) and subsequently put to death at Sirhind, despite the remonstrances of Sher Muhammad, who thereby earned the gratitude of the Gurú. In return for his services to the empire Sher Muhammad received the ilique of Khamano in fief, and at his death in 1712 the State comprised the 13 pargands of Bahlolpur, Khizrábád, Khamáno, Isru, Pail, Dhamot, Amloh, Bhadson, Kapurgarh, Nauganwa, Sherpur, Balian and Maler.

The next Raís, Ghulám Hussain Khán, was a timid man, of a simple and peaceable disposition. He, in his lifetime, excluded his sons from the chiefship, for what was considered to be pusillanimity, and installed his brother Jamál Khán on the throne. He himself abdicated and took a small jágír of five villages, called Panjgiráin, for his expenses.

Jamál Khán was a great chief in his day and the ancestor of all the ruling family and the leading jágírdárs in the State of the present day. Shortly after his accession he became engaged in a guerilla warfare with the neighbouring Sikh chiefs, and encountered the Rája of Patiála at Sanghera in a sharp fight, in which, though at

⁽²⁾ It is also said that Bayarid Khan recovered the title of Nawab from the Emperor, (2 Its name was Habibwal, but here-named it Sherpur,

chap. I, B. first victorious, he was defeated, his force taking to flight on seeing some of their leaders killed in an ambuscade. He thus lost the Sanghera ildqa in purgana Balián, including Hádiáya, which Ala Singh made his capital. In 1747, however, he received a letter from Ahmad Sháh, Durráni, requesting him to disperse the Sikh forces, which were gathering in the country between the Sutlej and Sirhind, and he accordingly sent a force under his son, which defeated the Sikhs and pursued them as far as Samad. For this service Ahmad Sháh gave him a robe of honour, but some time after this event he allied himself with the Rai of Raikot in a demonstration against Alá Singh, the Rája of Patiála, and was signally defeated near Barnála. He thus lost this town, but soon after he took possession of Máchhiwára and Rúpar.

Upon Ahmad Sháh's departure from India, Adína Beg seized the opportunity to form an alliance with the Sikhs and take possession of Rúpar. Jamál Khán went to expel the insurgents from that place and he attacked it at the head of his troops, but it was strongly fortified and offered a stubborn resistance. During the siege Jamál Khán was killed by a bullet.

He left five sons, the eldest of whom, Bhikan Khán, became Raís. He seems to have been a temporiser, alternately a friend of the Sikhs and of Ahmad Sháh Durráni From the latter he received the right to coin in his own name, and during his sojourn in India, defeated the Sikhs at Rohíra and recovered certain villages which they had wrested from him. But after Ahmad Sháh's departure the Sikhs returned to the attack, and Bhíkan Khán, being worsted in a skirmish with Amír Singh at Kálájhár near Sámána, was retreating on Kotla, when he was shot from behind while drinking from a well by a Sikh villager. This occurred in 1763.

Bhíkan Khán left two sons, Wazír Khán and Fateh Khán, who were infants. His brother, Bahádur Khán, succeeded him. This chief's reign was a series of disasters. His arrogance made him obnoxious to the Kotla Afgháns, and the State treasure was in the hands of Bhíkan Khán's widow, so that his troops remained unpaid. But though deserted by all, his influential kinsmen, Bahádur Khán, offered a stubborn resistance to the Sikhs, whose superior forces alone enabled them to overrun the whole State, save a strip of territory round Kotla itself. The chief met his death in an engagement with the Sikhs at Jhal in 1766.

Bahádur Rhán also left two sons, Himmat Khán and Daler Khán, (4) who succeeded to their father's estate, but again the chief-

⁽¹⁾ He conferred the village of Bagrian upon the Bhais of that place.
(2) It is said that Bahadur Khan, at first their guardian, namped the throne.

Because, it would seem, she regarded him as an usarper, and retained the treasure on behalf of Wazir Khôn.
 Daler Khôn adopted Shiajam, but was enable to profess it openly

ship went to the eldest surviving brother, Umr Khán.(1) He CHAP. I. B. attempted to recover the villages taken by the Sikhs, and fought a battle at Tibba with his neighbour Raja Amr Singh of Patisla. The contest was carried on with varying results, until the Rai of Ráikot intervened, and a treaty was effected by which the Rája agreed to restore 116 villages to Umr Khan, but he only actually restored 74. Nevertheless, after this treaty, Univ Khán maintained friendly relations with the Raja. Asad-ullah Khan, the fourth brother, next became Rais. (2) He continued to live amicably with Rája Amr Singh of Patiála, and during that ruler's invasion of Sialba sent his troops to assist the Sikhs and thus cemented the alliance between the States.

On his death in 1782, Atá-u-lláh Khan (3) the last of the five sons of Jamal Khan, succeeded him. His reign was one of continuous war, but he held his own with some success. The valiant Sirdár Chuhar Singh of Bhadaur seized Kanganwal and Atá-ulláh Khán, fought and recovered it. Soon afterwards Diwin Nanu Mal was dismissed from his office in Patiála and took refuge in Kotla, where he proceeded to instigate Atá-ullah Khán to declare war on his old master, alloging that his treasury was empty and his subjects ripe for revolt. Atá-ullah Khán accordingly attacked the Rája of Patiála at Khánpur, but was defeated. Nánu Mal soon after died in 1792, at Kotla. The Bedi Sahib Singh new preached a holy war against the Kotla Afghans, as killers of kine, and attacked Maler with a large force. Atá-ullah Khán made a gallant resistance, but, being unable to hold the town, he retreated into Kotla, which was more strongly fortified, and despatched messengers to the Rája of Patiála for assistance. The Rája's troops were encamped at Amrgarh, but before they reached Maler Kotla, the Bedi, who had received a bullet-wound in the siege, withdrew his troops and retired across the Sutlej.

By 1788, the Mahrattas had become predominant in that part of the country which lies between the Jumna and the Sutlej. They were gathering strength under Sindhia, when the British first defeated them at Laswari in 1803, and again General Lake's forces gave them under Holkar a crushing defeat in 1805. In General Lake's campaign against Holkar, Atá-ullah Khán joined the British forces with all his troops and followers, and continued with them till the victory of Laswari was complete and the English had become the paramount masters of the cis-Sutlei country.

In 1808 anjit Singh, having deprived Rrikot of the last shred of independence and divided the villages of that State between

1794 A. D.

⁽¹⁾ It is said that Umr only succeeded to the guardianship of Wazir Khan, but sabse-quoutly usurped the throne: while Bahadar Khan's sols only succeeded to their father's private estates because he was not de jurs Nawah or Ruis. (2) Or guardian of Wazir Khan. (3) As guardian of Wazir Khan, it is said.

Mayer Kotla State.

CHAP. I. B. Jind, Nabha and other chiefs, turned towards Kotla and demanded a lákh and a half of rupees as the price of his non-intervention. Two-thirds of this sum were paid at once. For the remaining Rs. 50,000, five villages(1) were mortgaged to the Mahárája, who, despite the remonstrances of Sir C. Metcalfe, established military posts which were subsequently removed by Si. D. Ochterlony. Ranjit Singh had also left his Tahsildars and Thanedars to recover the money, but in 1810 the State came under British protection, and the Sikh officials were removed. When Ranjit Singh came to Málor Kotla, Wazír Khán hid his claim before Sir C. T. Metcalfe, the British envoy, who told him that he could not interfere as the treaty with Mahálnája Runjít Singh had not yet been signed. After the treaty of 1809, and the British proclamation of a protectorate over the Cis-Sutlej territory, Wazir Khán 'laid his claim formally before Sir David Ochterlony declaring that he was the rightful heir, but being an infant at his father, Nawab Bhikan Khán's death, his uncles had usurped his rights. The case was pending when Atá-ulla Khán died in 1810, and his son Rahmat Ali Khán claimed the Raís ship. But the rights of Wazir Khán were upheld and he was made Nawab.

> At the same time the British Government directed that the law of primogeniture should in future apply.(2) Wazir Khán led an uneventful life. He assisted Sir D. Ochterlony with supplies and transport in the Gurkha war, and his son, Amír Khán, served with a small contingent at the siege of Malaun in 1814. Wazir Khán, dying in 1821, was succeeded by his son, Amír Khán, who himself led a contingent force to serve in the first Kabul war of 1859, and fought on the side of the British at Múdki and Ferozsháh, receiving in recognition of his services (1) the villages of Maherna-Rasúlpur and Fatehpur Chhanna with the title of Nawab. He sent another contingent to help the British in the second Gurkha .. campaign. He died in April 1846 and was succeeded by his son, Mahbúb Alí Khán, better known as Sube Khán. Like his Sikh neighbours, he was on the side of the British in the Mutiny of, 1857 and did good service at Ludhiána accompanied by the other Kotla Kháns. He died in November 1859.

His son, Sikandar Alí Khán, seems to have spent all his time in quarelling with his relatives He had two sons, both of whom died young.

Sikandar Ali Khán then nominated Ibráhím Ali Khán, the eldest son of Diláwar Ali Khán, as his heir, in pursuance of the right of adoption conferred on him by the British Government in

(6) In 1824 his troops also suppressed the Akilis, who had committed a murder at Shahbad.

⁽¹⁾ Lehra, Pohir, Jhamet, Kulahr and Janghera. "(2) Wazir Kháu's brother, Fatch Khán, held a separate jdgi. His branch ended with Yakub All Khán, who brought a maulri, Abdar Rahim, from Ráikot to teach Asabio in Malar Koula, and thus atoned for the debauchery which caused his early tienth.

MALER KOTLA STATE.] . Minority of the Nawab.

1861. The present Nawab, Muhammad Ibrahim Ali Khan, is CHAP. I, B. thus the great-grandson of Ata-ullah Khan, the fifth son of Jamal Kistory. Khan.

In 1866 a council, consisting of Munshi Kanhaya Lál, Qázi Ghulám Sarwar and Saraj-ul-Haq, was appointed by Government to adjust the claims of Jamál Khán's descendants inter so, and also those of their servants. In this same year a salute of 9 guns was conferred by Government on Nawáb Sikandar Ali Khán and his successors.

In 1869 trouble arose between the Nawab and Ghulam Muhammad over an alleged mortgage of the village of Choong to the former. Bloodshed ensued, but the matter was eventually compromised.

Nawab Sikaudar Ali Khan was present at the Vicerogal darbar of 1869, held in honour of the late Amir Sher Ali Khan of Kabul, and next year went to Lahoro to have an audience with His Royal - Highness the Duke of Edinburgh.

On the death of Nawáb Sikandar Ali Khán in 1871, the line of Bhíkan Khán ended, and Ihráhim Alí Khán, his adopted son, succeeded him at the age of 14, his cluim being formally recognised by Government in 1872. Mr. Heath, an officer of the Punjab Commission, was appointed Superintendent of the State during his minority. A year after his accession, i.e., in 1872, the fanatio Kúkás attacked Kotla, killing some townspeople and plundering houses. After their withdrawal from Máler Kotla, they made for Patiála territory, where they were captured and handed ever to the Máler Kotla authorities, and they were executed by Mr. Cowan, Deputy Commissioner of Ludhiána, under orders of Mr. Forsyth, Commissioner and Agent of Ambála.

The Nawab Muhammed Ibraham Ali Khan was invested with full power in 1875. The pernicions custom-whereby every scion of the house got a share of the State with full rights, -fiscal, judicial and administrative over it, -was discentinued during the reign of the Naváli and a new rale laid down by the British Government, whereby the Nawab alone was permitted to exercise judicial and executive powers within the State territory. The old Khan, Ghulim Muham. mad Khan, was, however, allowed to continue to exercise for life the judicial functions he had enjoyed during the rule of the late Nawab. Khán Ghulam Muhammed Khán died on the 3rd of May 1878, and his sons then ceased to exercise any judicial or revenue powers in their jagirs. The status of the Klinwinin, the members of Jamal Khan's family, was medified in the last settlement, and further modified by the Government in 1899 on their filing an appeal against the State in 1896. They have new no control whatever oven in their own villages, and are all more jugardure under the suzerainty of the Nawab.

MALBE KOTLA STATE.] Nawab-Ibrahim Ali Khan.

PART A.

CHAP. I, B. History.

The improvements made by this Nawab were:-

- (1) Seven schools were established in the State—two in Kotla and five in different villages. Of these only one, at Moler Kotla, still exists.
- (2) A charitable dispensary was established in Kotla.
- (3) Two new metalled roads were constructed in the State territory, towards Nábha and Sangrár. Metalled roads and drains were also made in the capital.

In 1877 the Nawab was invited to the Imperial assemblage at Delhi, and honoured with an additional salute of two guns as a distinction personal to himself on the occasion of the proclamation of Her Imperial Majesty the Empress of India.

In 1878, at the request of the Nawáb, Government sanctioned a contingent of 220 Infantry and 60 Cavalry which was equipped for Frontier service. Khán Sáhib Ináyat Ali Khán, brother of the Nawáb, was attached to the staff of General Sir John Watson as an Aide-de-Camp to represent the Máler Kotla State The State also supplied a number of transport animals for the British forces on their departure to, and return from, Kábul. In 1880, the Nawáb was invited to attend the Viceregal darbár held at Lahore. Two years afterwards, he attended the Viceregal darbár of Rúpar, held on the 24th November, to celebrate the opening of the Rúpar Ganal.

The Nawáb had three sons, Sáhibzádás Isháq Ali Khán, Ahmad Ali Khán, and Jáfar Ali Khán, of whom the eldest died in 1884 at the age of ten. The death of this son, followed closely by the death of the Begam, affected the Nawáb's reason and he withdrew from worldly affairs. The State had then to be placed under the management of a Superintendent by Government, and this arrangement lasted up to 1903, when Sáhibzáda Ahmad Ali Khán, the heir apparent, took charge of it from the Hon'ble the Nawáb of Loháru, the last Superintendent. The young Nawáb is a well educated and promising youth. During the régime of the Court of Wards the following four Superintendents managed the State affairs:—

- (1) Kázi Ahmad Sháh from 17th April 1885 to 13th September 1886.
- (2) Mr. G. E. Wakefield, the retired Deputy Commissioner of Ludhians, from 19th February 1887 to 17th August 1889.
- (3) Khán Bahádur Mirza Agha Muhammad from 18th August 1889 to 1st January 1893.
- (4) Council from 1st January 1893 to 1st May 1893.
- (5) The Hon'ble Nawáb Sir Amír-ud-dín Alimad, Khán Bahádur, K.C.I. E., Chief of Loháru, from 1st May 1898 to 1st January 1908.

Maler Kotla State.)

Nawab's ins nity.

PART A.

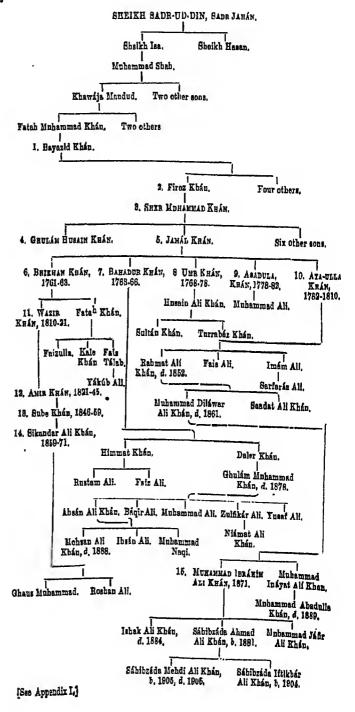
The period of his 10 years' Superintendentship is remarkable CHAP. I. B. for a number of improvements such as the construction of the Ludhiana-Dhuri-Jakhal Railway and the organization of the company of Imperial Service Sappers in 1894. The corps saw first service in the Tirah Expedition of 1897-98 and was again on active service in the China Campaign of 1900-01.

Sáhibzáda Ahmad Ali, Khán Buhádur, the heir-apparent of the State, was invited by Government to attend the Coronation Darbar of Delhi to ropresent his father, the present Nawah. While at Delhi, he took over charge as administrator from the Nawab of Lobáru on 1st January 1908, but officially at Máler Kotla on 22nd January 1908 and began to conduct the State administration.

From the 1st February 1905, the Sahibzada has been made Regent of the State. He was invited to Lahore on the occasion of the visit of the Prince and Princess of Wales in November 1905.

He married the cousin of the Nawab of Rampur in 1903. A son, Sahibzada Iftikhar Ali Khan, was born of this marriage in May 1904. Another son, who died, was born of the first Begam in 1905.

CHAP. I, B. THE GENEALOGY OF THE RULING FAMILY OF THE MALER KOTLA STATE.



Coinage.

[PART A.

The coins of the Maler Kotla chiefs extend over the following CHAP. I. B. reigns:—

Rais Bhikan Khán, A. D.	1761-63,	reigned	2	years.
Rais Bahadar Khan,	1769-08,	,,,	B	ņ
Rais Umr Khán,	1768-78,	>>	10	53
Reis Asad-ullah Khan,	1778-82,	,,	4	,,
Rais Ata-ullah Khán,	1782-1809), "	27	,,
Rais Wazir Khan,	1809-21,	#	12	,,
Nawab Amir Khan,	1821-45,))	24	,,
Newab Sube Khan,	1845-59,	3)	14	,,
Nawab Sikandar Ali Khan,	1859-71,	,,	12	,,

Another account differs somewhat from the above:-

1.	Nawab Bhikan Khan, A. D.	1754-61,	reigned	7	years.
2,	Rhán Sáhib Bahádur Kháu, "	1761-68,	"	5	,,,
3,	Khán Sáhib Umr Khán, "	1768-79,	,,	13	
4,	Khán Sáhib Aeád-ullah Khán.,	1779-83,))	4	 ນ
ŏ.	Khán Sáhib Ata-ullah Khán, "	1783-181	1, ,,	28	,,
Ô,	Nawab Wazir Khan, "	1811-21,		10	

Nawáb Amír Khán, , 1821-45, , 24 ,
 Nawáb Mahbúb Ali Khán, , 1845-59 , 14 ,

9. Nawab Sikandar Ali Khan, ,, 1859-71, ,, 12 ,,

1'-: Nawab Ibrahim Ali Khan ,, 1871 to present time.

The coins of all the chiefs from Bhíkan Khán are found in the State. There is no great difference in type except that the oldest coins are better cut, and a little larger and heavier.

CHAP. I. C.

Section C.—Population.

Population Máler Kotla has a density of 464 to the square mile—a figure which is only exceeded in the Punjab Native States by Kapurthala.

Table 6 of Although Máler Kotla has no irrigation, it slightly exceeds Ludhiána in density, Ludhiána showing 463 persons to the square mile.

Villeges and There is only one town, Waler Kotla, in the State. Of a total town, Table 7 of population of 77,506, the town accounts for 21,122, while the rural population is 56,384.

There are 115 villages in an area of 167 square miles. The occupied houses number 17,051, of which the town claims 4,987 and the villages 12,064.

The population at the last three censuses is shown in the Growth of population. The increase since 1891 is thus margin. 71,051 Table 6 of 1881 1891 75,755 1,751. As, however, the town of Maler Kotla Part B. 1901 77 506 has decreased by 632 in the same period the rural increase in the State is really 2,383.

Migration. The following table shows the effect of migration on the Talles and population of the Maler Kotla State according to the Census of 1901:—

	Persons,	Males.	Femalus,
Iumiorants,			
Individualis,			
1, From within the Punjah and North-West Fron- tier Province.	48,512	4,991	.18,521
2, From the rest of Asia including India	. 309	201	198
Total immigrants	18,911	5,192	18,719
Euigrants.			}
 To within the Ponjab and North-West Frontier Province. 	21,601	6,949	14,652
2. To the rest of India	26	25	1
Total emigrants	21,837	6,974	14,653
Excess of emigrants over immigrants	2,716	1,782	934

District or State.	Nowber of males in 1,000 immigrants	District or Stats.	Number of males in 1,000 immigrants.
Ludhiáns, 6,276 Paridla, 8,400 Nábha, 2,068 Hissár, 216 Ambáls, 261 Jnilmdur, 182	812 233 195 472 448 439	Ferozepore, 236, Jind, 488 United Provinces of Agra and Oodh, 246	960 141 487

The bulk of the immigration is from the Districts and States and Provinces in India noted in the margin.

PART A.

District or State.	Maies,	Females	District or State	Vales.	Females.
Karnál Ambála Jnilundur Ludhlána Ferozapore .	86 105 03 2,104 414	180 102	Patiila Nábha Jínd Chenáb Oolony	2,846 859 298 204	5,342 1,726 289 147

The emigra- CHAP. L.C. tion is mainly Population. to the Districts and States noted in the margin.

Migration,

The State thus loses 2716 souls by migration and its net Nett gain from + or loss to 712

Patidla 516 Nakha 2,051 624 Ludhiána Ferozapora 861 Chenin Colocy 246 United Provinces of

interchanges of population with the Districts, States and Provinces in India which mainly affect its population are noted in the margin.

Gain or loss by Intra-Provincial migration. 1891. 1901. 46,969 -3,089 Total

Comparison with the figures of 1891 shows that Maler Kotla lost by intra-Provincial migration alone 3,089 souls in 1901 or 10,048 more than in 1891.

Loss by intra-Imperial migration. 1901. 2,719 Total

Taking the figures for intra-Imperial migration, i.e., those for migration in India both within the Punjnb and to or from other Provinces in India we have the marginal data.

The figures for age, sex and civil condition are given in great detail in Table 10 of Part B.

Age. Table 10 o Part B.

The following statement shows the age distribution of 10,000 persons of both sexes:-

	Age	period.		bialoo.	Females.	Persone.		Ago	perlod.	•	Malcs.	Females	Persons
I	nfants	under	ı	174	169	838	25	and	under	80	899	366	785
1	and	under	2	54	49	102	80	1)	11	85	897	874	771
2	.,	υ	8	128	102	230	85	11	19	40	280	201	541
3	,,	11	4	118	107	220	40	. ,,	h	45	382	887	719
4	**	,,	Б	189	114	263	45	,,	39	50	224	160	884
5	j)	h	10	698	612	1,810	60	11	h	55	804	386	689
10	**	H	15	658	549	1,203	55	**	,, '	60	120	77	197
16	30	11	20	616	874	870	60	and	DYOT	•••	401	819	720
20	**	**	25	419	879	798							

CHAP. I.C. Population.

Vital Statisties. Tebles 11 to

18 of Pari B. Birth rate.

	Yea	r.		Males.	Fomales.	Total.
				1440	1000	
1896	***	***		14.25	12'05	26 57
1897	444	•••	***	18.94	10.88	24 77
1898	***	••		10.67	8.41	19 28
1899		•••	164	12.53	10.02	22.25
1900	•••	***		1585	12 02	27 87
Quinqu	ennial	averng	, ey	13'48	10.67	24.16

The average of births in the quinquonnial period, 1896—1900, was 24.15 per mille of the population; whereas the British territory of the Punjab returned 41 per mille in the same period. This probably shows that the system of registration in the State is imperfect. The marginal table gives the annual figures by sexes.

Death-rates.

The average death-rate in the same period was 16.04 per mille of the population as against

	Ye	ar.		Males.	Females.	Total,	
1896				20.29	18'19	19 24	
1697	***	***		16'24	18-51	14'87	
1898	***			15.80	1976	14.83	
1899	***	144		16.88	18.85	14'86	
1900	***	1.0	***	17.45	15.89	16'42	
Qulnqı	ennial	averag	70	17 15	1494	16:04	

registration. The figures by sexes are given in the margin. Plague appeared in the State in 1901-02, and in

32.4 in the Punjab, another proof of imperfect

that year there were 2,217 cases and 1,798 deaths. In 1902-03 there were 2,098 cases and 1,884 deaths. The disease re-appeared in 1908-04. No inoculations have been performed.

The number of males in every 10,000 of both sexes is shown Table 16 of Part B. below:-

					In villages.	In towns.	Total,
GENSUS OF-							
	(1881	***	***	**1	5,568	5,092	5,426 5,379 5,407
ALL RELIGIONS	{ 1891 1901	***	***	•••	5,515	5,040	5,379
	CIAGI	***	401	***	6,516	5,120	5,407
	(Hindús	•••	100		5,530	6,299	5,502
CENSUS OF 1901	Sikh	***	401		5,024	8,824	5.640
	(Muhammad	AUS	***		5,890	5,031	5,040 5,187
ما المارية		_					

Year of life,	All ro- ligions.	Hindús,	Sikhs,	Muham- magans,
Under 1 year ' 1 and under 2 2 3 4 4 5	909:8	893'5	790	956'3
	683:1	847'1	666-7	1,017'1
	600	862'6	619-4	805'2
	946:5	869'6	789-8	1,146'4
	619:8	797'6	691-8	921'5

The marginal table shows the number of females to every 1,000 males under five years of age in the census of 1901.

PART A.

Of the agricultural population of the State over four-fifths, or CHAP. I, C. 81 per cent., are Sikh or Hindu Jats; the remaining fifth com- Population. prises Muhammadan Kajpits, found chiefly in the northern part of the State; Gujars, Kambolis, in the immediate vicinity of the tribes, capital; Rains and a few Sayyid cultivators. The non-agricultural population is made up of Pathans, the dominant race, and other Part B. castes as noted below:-

Oastes and Table 15 of

Banias, of the Agarwal sub-caste, comprising the following gôts:-

4. Metal. 5. Mánsal. 6. Kánsal. Mangal.
 Sengal.
 Tail.

Aroras, of the Utrádhi and Dakhana groups, which in this Stute form endogamous sub-castes; Bhábras, Snnárs, of the Tank and Mair sub-castcs; Jhiwars, Chhimbas, Nais, Kumhars, of the Mihr and Bagri sub-castes; Sayyids, Sheikhs, Mughals, Ranots, Khojas, Kohelas, recent settlers in the State, and Nats.

Leading

Himmat Khán and Daler Khán succeeded to the estate of their father Buhádur Khán in 1768. Daler was only distinguished for his adoption of Shia tenets, and he was attacked in a procession by the Sunnis, after which he refrained from any open profession of that faith. Ghulam Muhammad, the son of Daler Khan, was also a Shia. He died in 1877, leaving five sons and a heavily encumbered estate. His sons succeeded him in this and it was placed under the Nawab. Two of his sons Muhammad Ali and Zulfigar Ali were educated at the Government Wards' Institute, Ambála.

Himmat Khán's son Rustom Ali was left in charge of Máler Kotla in 1857, while the Nawab and other Kotla chiefs were at Ludhiána and displayed courage and resource in the emergency. With the scanty force available he placed himself in front of the only unbarricated gate of the town and opposed a mutinous regiment which marched through the State on its way to Delhi, forcing it to pass on without assaulting the town. His cousin Ghulám Muhammad Khán was at Ludhiána where he received a seditious letter from one Idu Sháh, a Sufi, saying he had dreamt that the British were to be overthrown. This led to the execution of the Vakil of Muhammad Khán together with that of the Sufi and others, and the jayirs of Rustam Ali and Ghulam Muhammad were for a time sequestrated. In 1865 Rustam Ali died without issue and his idagir reverted to Ghulam Muhammad,

Rahmat Ali and his two brothers succeeded to the jagir of their father Ra'is Attá-ullah Khán on his death in 1809. In the Gurkha war of 1818 Rahmat Ali sent a force under Sube Khán to assist the British troops and 4 years later his brother Faiz Ali Khán, a man of stalwart stature, was employed against the Bhattis. Faiz Ali also commanded an irregular contingent in the Bartpur campaign of Population. Leading

families.

CHAP. I.C. 1826, when he was entrusted with the task of maintaining order in the Adik purgana and keeping a watch on Madu Singh. Later on Rahmat Ali at the instance of the British Agent at Ludhiána sent a small force to assist in repelling Phula Suigh Akali who had crossed the Sutlej with Sirdir Partib Singh. In 1846 he furnished a contingent of 700 horse and foot under his son Diláwar Ali. This force served under Lieutenant Lake at Mudki and Firozshah till the end of the war. Rahmat Ali himself remained at Kotla to assist the passage of the British troops through his territory and to reassure the people. With the Rai of Raikot he was employed to garrison Latala, a Nábha village, the Rája of which State was encamped at Upoki. Towards the close of his life he laid claim to the idgir of Yakub Ali, great-nephew of Ra'is Wazir Khan, and taking umbrage at the rejection of his wholly inadmissible claim went to Calcutta where he died in 1852. He left two sons Dilawar Khán and Saadat Ali, and Rahmatgarh, a village founded by him. perpetuates his name His early death was a loss to the State as he was a thorough soldier, strict in religious observances and a good manager of his estate. His son Diláwar Ali Khán succeeded to his jágír. An accomplished Persian and Arabic scholar he served at Ludhiána with all his retainers in 1857 and died in 1861, leaving two sons, the elder of whom Ibrahim Ali Khan became Nawab in 1871.

CHAPTER II-ECONOMIC.

Section A.—Agriculture.

The State was treated at settlement as an Assessment Circle, and CHAP.II A. there are not sufficient differences in so small a tract to justify subdivision.

Of the total area, 513,404 bighús kuchcha, 87 per cont is cultivated, of the remaining 13 per cent., 6 per cont. being unculturable waste, and 7 per cent. culturable, of which 3th or 1 per cent, is reserved as birs by the State or its jagindars.

The State contains four distinct classes of soil:—

(1) Dákar, a hard loam, heavy and low-lying.
 (2) Rausli, or light loam.

Loams.

(3) Blur, or sand, light and high-lying.(4) Pilak, an inferior yellorish sandy loam.

average yield of these two soils is about the same.

Sandy soils,

Of these the Dakar is considered the best but there is not much of it. It requires an abundant rainfall, and then yields splendid crops. During years of scanty rain, however, the crops on it are the poorest. Rausli, the commonest soil in Kotla and the best adapted to the rainfall, is really Dakar with an admixture of sand. It is easily worked and with an average amount of rain yields good crops. On the whole taking the result of a number of years the

The proportion of learn to sandy soil is nearly 2 to 1. Blur may be further sub-divided into two classes: (I) when the sand doposit is not deep and has a sub-soil of good loam, it is easily ploughed, retains the moisture well and bears good crops, even with moderate rainfall: (II) when the layer of sand is deep, gram and moth are the only crops which thrive, and jourar, charri, otc., will not grow.

Bhur and Pilak are inferior soils and exist to a large extent in many villages especially the western ones. Here as elsewhere in the Punjab up-lands the Blur is formed out of the Ransli itself when much tilled. The sand is silted up, leaving the clay particles behind. Irrigation restores the elay and large tracts of Blure thus become Ransli or even Dákar.

Pilak is really Blur with a sub-soil of yellowish clay, whence its name. About 30 per cent, of the total area is Blan or Pilak.

The irrigated soils are classed as uidi or lihalis. The former Irrigated soils are classed as uidi or lihalis. The former soils. lies immediately around the village-sito and is heavily manured. yielding two, or even three, crops a year. The latter adjoins the outlying wells and is only slightly manured, yielding but a single crop.

At the time of settlement only 16 per cent. of the cultivation CHAP-II. A. Agriculture was irrigated from wells. There is no other irrigation.

cultivation.

On univergated land the dofasta dosála system of cultivation invariably obtains—land is ploughed for a whole year, and then a Kharif and Rabi are taken in succession. Of irrigated land, almost the whole niái is double-cropped, while the khális is devoted almost exclusively to wheat.

Cropping. Table 19 of On unirrigated land the cropping is very simple. The Kharif consists altogether of jowar or charri mixed with moth or mung, Part B. and the Rabi of mixtures of gram with wheat or barley, with sarson in lines at intervals.

> The principal irrigated crops are maize and cotton in the Kharif and wheat in the Rabi; the other grains in the Rabi being chiefly barley and other zabti fodder crops like metha, scribi, carrots, etc., except in Kotla and Maler where Arain tenants grow garden crops on a large scale. The niát soil is heavily manured for maize and cotton and then after these are cut slightly manured again for the Rabi. Maize is almost always followed by wheat or barley, and cotton by some of the fodder crops already mentioned.

Of the total population 37,907 are returned as agricultural; the incidence of land per head of the total population is 1.2 acres.

The State was nover surveyed until 1889, and consequently-it is impossible to trace the increase in cultivation. At present, however, cultivation has evidently reached its limit as 87 por cent. of the total area is under cultivation and 6 per cent. unculturable, while the remainder is quite inadequate for pasturage and unlikely to be further roduced. The Settlement Officer reported that as a general rule the villages were badly off. No stores of gram or straw were to be found, and the villagers were heavily in debt. The settlement, however, has reduced the assessment and the condition of the people is better now than it was in 1890.

Sales and Part B.

Sales and mortgages are forbidden except with the consent of mortgages. Table 21 of the Nawab. Sales are very raro, but mortgages with possession exist to some extent. The mortgagor makes over his land temporarily to the mortgagee for cultivation, the mortgagee being recorded as tenant-at-will.

The Land Improvement and Agriculturists Loans Acts are not Takavi. Table 20 of in force; but the State grants loans to the camindars for agri-Part B. enltural purposes, such as construction of new wells, repair of old ones and purchase of bullocks. The works are superintended by the State and care is taken that the money is spent for the purpose for which the loan is given. The system is liked by the people and no difficulty is experienced in realising the money. The rate of interest charged is 61 per cent. per annum. The period of repay. ment allowed in the case of a loan for the construction of a well is

PART A.

12 years and in the case of a loan for the purchase of bullocks CHAP. II.A. 2 years.

Agriculture

An enumeration of cattle, ploughs, carts, etc., was made in 1890. The plough cattle are of very fair breed, generally imported Part B. from Hissar and Sirsa and costing from Rs. 60 to 80 a pair. Well cattle also from Hissar and Sirsa cost Rs. 100 to 120. The number of horses and ponies is proportionately large, as many leading men have procured mares for breeding purposes.

Cattle Fairs are held twice a year in Maler Kotla town, from Cattle Fairs, the 20th to the 30th March and from the 10th to 20th October. They commenced two years ago and have already become large and important. The cattle come from all the surrounding Districts and States, especially from Hissar mui Amritsar. A considerable number of ponies are also brought for sale. The number of animals sold is about 1,800. Rewards are given by the State for the best exhibits in the different classes attending the Fair.

One horse and one donkey stallion are kept by the State for Horse-breedbreeding purposes. Some 25 mares are annualy covered, but the Table 23 of results of late years have not been good. For this reason, a new Part B. donkey stallion has been bought, and it is hoped that the yield of mules will be greater.

At the time of softlement in 1890 about 16 per cent. of the cultivation was irrigated. Wells are the only method of irrigation. The Bhatinda branch of the Sirhind Canal flows through the State but does not irrigate it (see above, p. 1). The Nawah of Loharu proposed that 3 rajhahas should be made in the State, one to irrigate 7 villages north of the Bhatinda branch; another from Mominabad to Panjgirain: and the third from Sarand to Ghanaur Kalan", but no decision has yet been made. The total number of wells in use at the time of settlement was 1,151, of which 2 per cent. had more than two buckets each, about 27 per cent. two buckets each and the rest one. In 1903 the number of irrigation wells had risen to 1,427.

Irrigation,

The avorage area irrigable by a single bucket well is 11 and by a double well 17 acres. Water is found at a depth varying from 13 to 39 feet, the average depth being about 24 feet. It is sweet throughout the State. Alaizo and cotton need to be watered every five or six days, while for wheat and the other Rahi crops one watering in 20 days is enough. There are tanks or ponds in almost overy villago. These are used by enttle and irrigation from them is not feasible. There is no stream flowing through the State of sufficient size to repay the construction of a band.

MALER KOTLA STATE.]

CHAP. II, D. Mines

Section B.—Rents, Wages and Prices.

andMineral Tables 25 and

At the time of settlement some 10 per cent. of the cultivated area was in the hands of tenants-at-will, 6 per cent. paying cash-Rents, weges rents, and 4 per cent. paying kind-rents. The most usual form of cash-rent is that at revenue rates, with, in some cases, a very light 26 of Part B. málikána. But in a few cases a true cash-rent in a lump sum is paid, and in these the average rate per kachchá bigha (a of a pakka bigah), analysed according to soils, gave the results shown in the

margin. The batái-paying tenants paid a Rs a. p. 3 12 0 Soil. proportion of the produce, varying from the Nidi châhi .. 1 G 11 Khdlis chahi (plus 4 ths of the rovenuc) to one-half, both Dákar, Rausli 0 12 11 ••• of the grain and straw. The most usual Bhur, Pilak 0 14 10 Mixed ront was found to be ard of the grain, plus 0 15 Ith of the straw, the kamins' dues not being as a rule deducted before division, though they were so deducted in all other cases. The value of the reut of a kachchá bigha worked out to Rs. 2-3-6 on cháhi and As. 8-7 on báráni.

· Prices.

Prices in Kotla rule much as they do in Ludhiána, and now that the two towns are linked up by the railway, the prices in one may be taken as the prices in the other.

Section C.—Forests.

Forests. Table 27 of Part B.

The State contains no forest land except four small birs with a total area of 4,516 kuchcha bigáhs or 940 acres. Ono of these, 1,399 bighás in area, belongs to the Nawab and the remaining three to the collateral jagirdars. They are preserved for fuel and grass and have been separately surveyed. In two of the birs there is a little cultivation, the tenants being entered as tenants-at-will.

Section D.—Mines and Mineral Resources.

Kankor.

The State contains no mines but there are kankar quarries in many of the villages. In Tahsil Maler Kotla, the best quarries are in villages Kup, Jitwálkalán, Málor Kotla, Haidarnagar, Hatwa, and Akbarpúra; in Tahsil Panjgiráin excellent kankar is obtained in Ratolán Adanwal, Sangala, and Lachchha Baddi. Tho kankar quarried in Kup is the best, but it is everywhere good. The supply is more than sufficient for the State reads, a certain amount being exported.

Sections E. & F.—Manufactures and Trade.

CHAP. II.G.

The hand-industries are the usual ones and there is little to Communicanote about them. The Hindu and Muhammadan ironsmiths of Maler Kotla and Rohera, however, make excellent household utensils and Hand-indusagricultural implements which are extensively exported to different ries. parts of the Punjab. The rath made in Maler Kotla is also famous. Mention must be made of the Kotla paper which is largely expertcd. It is made by the people in their homes. No large factory for its manufacture exists.

There is a small factory in the Town of Maler Ketla where all kinds of survey instruments are made. It employs about 20 hands. Part B. A new factory for cotton pressing, also in Malor Kotla commenced working in November of 1904. About 300 hands are employed in it. The wages given are for a man 6 annas, for a women 3 annas, and for a child 2 annas. The cotton is obtained for the most part in the State and is sent to Bombay and Karáchi for exportation. The cotton-seed is sold locally.

Factorics. Table 28 of

English cloth, salt, and lime are imported from Dolbi, Amritsar, or Lahoro; while grain, instruments of Survey, Kotla paper, and iron utonsils are exported to Ludhiana, Bhatinda, Lahoro and Patiála; cotton is sent to Bombay or Karáchi.

Trade is confined to the town of Muler Kotla and the castes engaged in it are Banias and Khojus. All the exports and imports nro conveyed by the Railway.

Section G.—Means of Communication.

The Ludhiána-Dhuri-Jakhál Railway traverses the State with stations as Knp, Maler Kotla and Lacheba Buddi. The line was constructed in 1900, at the cost of the Jind and Maler Kotla Darbars, the latter contributing 1th of the cost, which amounted to 40 lakhs.

Roilways.

The State has about 38 miles of metalled roads, the principal connecting Ludhiána with the town of Maler Kotla, whonce it bifurcates, one branch running to Nabha via Bagrian, the other to Sangrúr through Dhuri. A short road, 2 miles long, connects Máler Kotla with Sherwani Kot.

Roads.

The chief unmetalled roads are as for	llows	;	Milos.	Unmotalled roads.
From Máler Kotla to Paujgitáin	111		11	
From Maler Kotla to Kanganwal	***	***	6	
From Maler Kolla to Saland	*11		5	
From Malor Kotla to Kup		***	6	
From Kup to Panjgirain	•••	***	12	
Brom Kun to Cavand			A.	

CHAP.II,H. Famine. There are two scrais in the State, one opposite the railway station of Maler Kotla and the other near the Moti Bazar in the city.

Serais and Rest-houses. Table 29 of Part B.

An oxcellent Dâk-Bungalow has been built near Máler Kotla Railway Station. There are also two State Bungalows, in Dhúler Kalán and Panjgiráin. They are used by the officials when on tour, but permission to use them can be obtained from the State.

Post Offices. Table 31 of Part B. The State contains 5 post offices with a postal telegraph office at Maler Kotla (see table 31 of Part B). It has never had stamps of its own.

Section H .- Famine.

The State is practically socure from famino on account of the number of its wells and the nature of the soil. There was great scarcity of food, however, in 1896 owing to drought. The State instituted numerous relief-works, such as making roads in Máler Kotla and Jamálpura, repairing the Ludhiána road, and constructing new village tanks. Money was also distributed to the poor. About Rs. 20,000 were spent on the relief-works and 4,000 men were employed on them. Revenue was suspended to the extent of Rs. 33,000 though it was all collected the following year. Rs. 3,000 were given as takavi for the purchase of bullocks.

CHAPTER III.—ADMINISTRATIVE.

Section A.—General Administration and Administrative Divisions.

The present form of administration in the State has only been in existence since the end of 1905. The Nawab is the head of the State and the following Departments are directly under him:—

> Home and Foreign offices, Revenue and Finance Department, Military Department, and the Judicial.

The Home and Foreign offices are in charge of the Home and Foreign Minister who is the most important official in the State, Foreign assisted by a Deputy. The Departments which make up the Home and Foreign offices are shewn below:-

General Administration and Administrative Divisions. Administra-

CHAP. III, A.

Home and

Home Office.

Public Works Department. Medical Department.

Public Instruction.

Religion. Police. Tasrifét.

Fureign Office.

Motemids and Vakils. Kuilway.

Correspondence with Government and Native States.

Most of these are described in the sections which follow, and only a few of them need be mentioned here.

A Superintendent with an Assistant is in charge of the Tasrifat or Karkhanajat. They comprise:-

- (a) the gardens with a munsarim in charge;
- (b) the Tosha Khána with a mursarim and two assistants;
- (c) the Farragh Khana with a munsarim;
- (d) the Mehmándárí and Inám Bakhshish with a munsarim in charge;
- (e) workshops and stores with a munsarim;
- (f) State-stables under a darogha.

There is a motamid always in attendance on the Commissioner and Superintendent of the Jullunder Division, and a rakil with the Deputy Commissioner of Ludhiána.

The Revenue and Financial Departments are under the Diwan. On the Revenue side the Núzim is subordinate to the Diwan and under him are the Tahsildars. The Tahsildars have the powers of Assistant Collectors, 2nd Grade, and their appeals go to the Názim. Appeals from the Nazim's decisions go to the Diwan. The Diwan only has power to suspend, appoint, or dismiss zaildars, lambardárs or kanungos, or to confiscate unuafis. In such cases there is an appeal to the Nawab,

Motamids.

Revenue and

CHAP-III, A. General Administration and Administrative The Názim under the control of the Díwán is also in charge of the Court of Wards, Municipalities including sanitation and vaccination, excise and opium, Income-tax, and Registration. The two Tahsíldárs are Sub-Registrars.

On the Financial side, the Bakhshi is under the Diwan. The Treasury, Accounts, Mint, Stamps, and pensions are in his charge.

Divisions. Finance.

Military.

The Military Department has as its head the Officer Commanding the State Forces. Under him are the Commandants of the Imperial Service Sappers and Miners, and of the irregular Cavalry, Artillery, and Military Police.

Judicial.

At the head of the Judicial Department is the Chief Judge who also exercises general control over the Jail, General Record office, Pleaders and Petition-writers. The subordinate Courts are described in the following section.

Talislie,

For administrative purposes the State is divided into two Tahsíls, Máler Kotla and Panjgiráin. Each is under a Tahsíldár, and the appointment of Naib-Tahsíldárs is under consideration. Panjgiráin only became a separate Tahsíl in 1903.

Thángs.

The latter forms a thána, and the former is divided into two thánas, Máler Kotla town and Saraud which includes all the villages of this Tahsíl. Saraud is about 5 miles from Máler Kotla.

Zaile.

Each Tahsil is divided into 7 zails :--

Zails.	Måler	Kotla.		Number of villages.	Zails.	P	anjgirai	n,		Number of villages.
1 2 3 4 5 6 7	Máler Kotla Seraud Rishangarh Jan Dahliz Kalán Dhuler ,, Knnganwal Rohera	itbi	***	3 12 10 6 8 12 12	1 2 3 4 5 6 7	Mithewal Kotala Bhudan Hathan Badechha Jhoner Khard	511 511 611 611	411 411	411 114 441 11 114	3 9 10 13 7 6 6

Lambardárs.

There are 159 lambardars in Maler Kotla Tahsil and 154 in Panjgirain. These numbers include 3 sufedposhes in the first Tahsil and 4 in the second.

The lambardári cess was fixed at 5 per cent. of the total demand. This gives an income of Rs. 15,000 from which both the zaildárs and lambardárs are paid. They do not receive a percentage of the revenue collected in their villages but get a fixed sum from the State which is increased or decreased according to the services performed by the holder of the appointment. The average pay of a zaildár is Rs. 120 per annum and of a lambardár Rs. 40.

The village	revenne	staff .	is shown	in	the	following	table :-
	10101110		10 11101111	***		т	

CHAP. and inal ice.

Tı	de il		Office and Field Qanúngos.	Patwáris and Assistants,	Civil and Criminal Justice.
Sadr Måler Kotla Tubsil Panjgirain Tabsil	*** *** *** ***		 1 2 2	"B 10	Revenue Strff.
•	Tolal	•••	 б	87	•

There are two grades of paticaris, receiving Rs. 12 and Rs. 10 respectively a month. An assistant patwári gets Rs. 7.

At settlement, the Patwar cess was fixed at Rs. 3-9-4 per cent. of the total demand.

As regards extradition of criminals, there is an agreement Extradition. between Maler Kotla State and the neighbouring States of Patiala, Jind, Nubha, and Faridkot that all criminals of any description may be taken by Malor Kotla from the others to be tried for offences committed in its territory.

Section B.—Civil and Criminal Justice.

The Indian Penal Code is enforced in its entirety, no substantial modifications having been introduced. In case of necessity slight changes are tolerated as the exigencies of a case may suggest, but such occasional changes do not form legal precedents in other, though similar, cases.

Justico.

The British Code of Criminal Procedure has also been wholly adopted by the State. No substantial modifications have been introduced, though slight changes are tolerated as in the case of the Indian Penal Code. -

The State contains the following Courts: -

(1) The ijhis-i-khás, or Court of the Nawab. This can scarcely be called a Court but appeals from the Chief Judge are heard in it and sentences passed in murder cases confirmed. If a senience of death is passed, the sanction of the Commissioner of the Jullundar Division has to be obtained.

Courts. Ijlás-i-khás.

The Court of the Chief Judgo who hears appeals from the sadr addlat in civil suits. The Chief Judge Chief Judge. also hears criminal apposls from the Court of the Nazim or District Magistrate and criminal cases beyond the powers of that Court at present, there is no Chief Judge, and his duties are being temporarily performed by the Diwin.

CHAP. III, C. Land Revenue. Sadr adélat.

(3) The sadr addlat, presided over by the sadr addlati who hears all civil suits beyond the powers of the addlati without limit as to value. All appeals from the addlati and Munsifs go to him. He has no criminal jurisdiction.

Adálat.

- (4) The addlat presided over by the addlati who is a Munsif, 1st Grade. He hears original civil suits up to Rs. 300. He is also a Magistrate, 1st Class, and, in this capacity, is subordinate to the District Magistrate.
- (5) The Court of the Nazim who is the District Magistrate. He hears appeals from the subordinate Magistrates and original cases beyond their jurisdiction, he has power to impose sentences up to 7 years' imprisonment and Rs. 1,500 fine. Appeals from his decisions go straight to the Chief Judgo.
- (6) The Courts of the two Tahsildars who are Munsifs, 2nd Grade and Magistrates, 2nd Class. As Munsifs, they have only jurisdiction in civil suits up to a value of Rs. 150.

The number of cases, both civil and criminal, is very small, and there is no form of crime unusually common in the State.

Pleaders.

Permission has lately been given to Pleaders to practice in the State. At present three are two.

Section C .- Land Revenue.

Tenures and dalhilldri Tribes. Assessment Rep., § 95. Details of tenures and dakhikári tribes with area held by each are given in Statement No. VI of the Assessment Report. Out of the 119 villages, 100 are held on paltidári tenure, 3 on pure zamíndári, leaving only 16 with bhanchára tenure. This fact goes strongly against the assertions of the Pathán that the cultivators are all mere tenants. Several of the large villages are much older than the State itself.

Assessment Rep., § 26. The average holdings of dakhilkars with net income are as follows:—

Tribes.	Number of sheres por holding.	Average holdings.	Gross income per Produce Estimate.	Deduct rerenue and cesses paid,	Total net income.
Jats	1 2 to 1	81	177	55	122
Others		60	123	30	84

Thus each Jat sharer has about 65 and others about 42. The people in Kotla are on an average decidedly better off than in Kalsia and Pataudi, having much more land per share. Those with small holdings are however in straitened circumstances.

In the villages dukhilkins onlivate 91 per cont. themselves; the remaining 9 per cent. being held by tenants-at-will paying rents in kind and cash at various rates. In Maler Kotla occupancy tenants paying in kind hold 16 per cent, and paying in cash 29 per cent. Tenants-at-will cultivate 11 per cent. on batai, and 1 per cent. on cash rents. The remaining 15 per cent. is held by jogirdám and muálidárs themselves.

CH AP. Land Hevenue.

Cultivating ocenpanoy. Assessment Rep., § 27.

Before the State was granted to the Afgins the revenue was taken in cash by appraisement, but Saikh Sadr-nd-din, the original lory. jagirdar, if he can be so called, began, it is said, to levy one-third nep., § 11. of all corn and one-fourth of all straw including chari. This system was extended to the villages subsequently added to the State and continued in force up to 1864. The grain and fodder thus obtained were stored and sold at the chief's pleasure.

Piscal his-

The first cash assessment was made by Lala Kanhya Lal. He first settled the villages of his wards (the present Namib and his necessment brother) in 1864-65, and then those belonging to Namab Sikandar neg., § 12. Ali Khan at his own request. The demands fixed were based on the average collections of grain and folder for 5 or 6 years converted into each at provailing prices. The leases were given for 5 years, i.e., to 1870, and the demand being moderate was easily realised without causing any distress. The general rate in this assessment was 7 annas per kacheha bigah.

The second assessment was made by Nawab Sikandar Ali Khan Assessment limself in 1870. A survey and Record of Rights were also begun kandar Ali for the Nawab's villages, but he died before their completion. The Khan. 1-ases were calculated in a very crude way.

Astrasment. Rep., § 13.

The villagers were asked what area of cultivated land they pessessed, with the dotails of its soils and cultivation. Rates were then fixed on the yield and thus the demand of each village was arrived at. These leases run on till 1879, and as the revenue was generally moderate it was easily realised. The unfinished Settlement Records were completed under Mr. Heath, Superintendent, during the minority of Nawab Ibrahan Ali Khan.

The third assessment was made by the present Nawib in The access 1379-80, through the Tahsildars. The amount of each lease was ment of 1880. determined according to the offers made by contractors or bids Rep., § 16. by money-lenders. As a rule this assessment was naturally a fall one and too heavy in some villages, the general rate on cultivation being 12 annas 7 pies per kachcha bigah. The demand was however realised in full though it caused distress, especially in the over-assessed villages, in bad years. The term of these leases expired in Kharif 1890. The leases for the Rabi of 1891 were detormined by bids as usual, and as the harvest was an exceptionally good one, the demand was raised by about 38 per cent. This was hard on the people as no allowance was made for the preceding

CHAP. III, C.

Kharif, which had been a very bad one, though its revenue had been realised in full.

Land Revenue.

Assessment

Rep., § 15.

The leases given by Kanhaya Lalin Khan Sahib Inayat Ali Khán's villages ran on to 1877, when fresh leases were given by Leases of Mendhu Lál, an official of the Khán. The demand under these was K. S. Inégat more than double that of Kanhaya Lal's, the general rate on cultivation being 14 annas 4 pies per kachcha ligah, and the revenue continued to be taken under these leases.

This demand was excessive, and inequally distributed though, if properly distributed, it could have been paid, with some remissions in bad seasons. Several villages were much over-assessed and

small unrealised balances have occasionally accound.

K. S. Ghulám lnges. Assessment Rep , § 16.

The villages originally held by Ghulam Muhammad Khan, Kháo's vil- before he received a share of Nawab Sikandar Ali Khán's portion, had never been properly assessed. His system of levying revenue was not uniform; in some villages he continued to take batái, in others he gave annual leases or for a term of years, either to the cultivators or to contractors.

badly off, Inayat Ali Khan's villages being the only ones in which

The other villages, which came into his presession on the demise of the late Nawab, had been assessed by the latter in 1870, and some of them continued to pay this revenue up to 1887, when batái was again introduced by Ghulam Muhammad Khán's sons.

The general rates on cultivation paid by these villages in 1887 were:--

'n. -

				189. A.	p.	
Nawab's vill	ages	•••	•••	0 12	7	
	Ináyat Ali Khán's	•••		0 14	4	
D٥.	Ahsan Ali Khán's	***		0 14	7	
Do.	Bakar Ali Khán's	•••		0 11	6	
D_0 .	Mahammad Ali Khán's	***	•••	0 11	3	
Do.	Zulfigár Ali Khán's	•••	105	1 0	3	
Do.	Yusaf Ali Khán's	•••	•••	0 11	0	
General rate	,.,			0 13	1	

From these it is clear that the villages of Khán Sáhib Alsan Ali and Zulfigár Ali were over-assessed while the rest were comparatively well off.

Other Jágirdárs. Asses-ment Rep., § 17.

In the villages of jagirdars other than Khawanins, the revenue had usually been taken in kind for a long period. In some cases, e-pecially where the State held a share, leases or contracts had been given, for amounts determined by the bids of contractors.

Commencetlement oper-

The operations of the last Settlement commenced in Maler ment of Set. Kotla in September 1887, when Muhammad Yamín, a Qinungo from Gurgáon, was appointed Settlement Tahsildár under the Superintendent of the State. They were at first confined to the villages of the Nawab and the minor sons of Ghrlam Muhammad Khan who

PART A.

were under the Court of Wards. The six months from September 1st, 1887 to 1st March, 1888, were spent in instructing the old Hindi-knowing patracis and getting copies of the existing field maps and registers for crop inspection purposes. In November, 1887, the Settlement operations were extended to the whole State, the power of the assignees being withdrawn by Government. In March, 1888, the first crop inspection was made in all the villages which had field maps, except those of Khán Súhib Ináyat Ali Khán who refused to make over Lis patraris and papers to the Superintendent. In most villages the entries in the field register were cheeked by the Settlement Tabsildar.

CHAP. III. C. Land Revenue.

Betilement Rep., § 18.

In April Mr. Isa Chandú Lall was placed on special duty as Personal Assistant to the Commissioner of Delhi and directed to supervise the Settlement, working through the Manager of the State, without direct interference. On his first visit to Kotla at the end of May to check the crop inspection entries and see the old records, Mr. I. C. Lall was much hampered and opposed by the State officials, and found that hardly mything had been done during the previous nino months. On reporting this to the Commissioner he was placed in charge of the Settlement as Settlement Officer from 8th June, 1888.

The first Record of Rights was began for the Rhalsa villages by Nawah Sikandar Ali Khan in 1870, but he died before their records and completion and they were gradually completed under Mr. Heath, the Bettlement Rep. \$ 19. Superintendent, during the minority of Kawib Ibrahim Ali Khin. Most of these perished in a confingration at the office, but they were gradually replaced in 1884 and afterwards, by field maps and khasias made by the State amins, without check or supervision by the Revenue officials. The maps were drawn by sight and not to scale, and the entries in the Register being unattested were of hardly any value. Moreover, 19 villages had never been surveyed, and there were no records relating to them.

The old patráris were mostly ignorant Hindi-writing Banins whose only duty was to help in the realisation of the rovenue, whether paid in each or in kind. They were very badly paid, from Rs. 5 per mensem downwards and some in the jogurdars' villages only received Re. 1 or Re. 1-8 per mensen, but us they generally kept shops or wont in for money-lending, they were fairly well off. The paturis were supervised by amins who were fairly well up in the old methods, but could not muster the new system of survey.

In June, 1838, the whole State, except Imynt Ali Khun's Constitution villages, was divided into 37 patraisi circles, and three grades of cles and arpalvaris introduced on Rs. 9, Rs. 7 and Rs. 5 per mensem, respectivo-magements ly. The worthless Hindi khwans who had made no improvement settle whatever during the previous nine months were removed and re- Ref., § 20. placed by Urdu-knowing relatives where possible. A great many outsiders had also to be taken in, but care was exorcised that all

PART A.

CHAP. III, C. Land Revenue.

the classes of people were fairly represented as far as practicable. Nine munsarims were appointed out of the State amins and patwari teachers with two outsiders, on Rs. 20 and Rs. 15 per mensem,

Preparation of materials tor crop inspection. Sattlement Rep., § 21.

The staff thus constituted was then divided into several groups and set on to survey the nincteen villages which had no field maps, with the double object of teaching them the new system of surveying hy squares, as well as to get the maps and khasras ready to ensuro the Rabi crop inspection for the whole Stato. By means of hard working fifteen of these villages (some of them vory large ones) were surveyed by 1st October, when the crop inspection was made for 115 villages, the remaining four being too large to be finished in that timo. In September Khán Sábib Ináyat Ali Khán also made over all his papers and patwiri staff to the Settlement Department, and a revision of the patuári circles resulted in 50 circles and 55 paticaris, their pay being increased in three grades to Rs. 12, Rs. 10 and Rs. 8 per mensem, respectively, in November, 1888. After the crop inspection of Kharif, 1888, the Sottlement staff made shapa nasabs and an elementary namabandi to form the basis of the Records of Rights, followed by the Rabi, 1889, crop inspection in March.

Enquiry into rights and status of caltivators. Setilement Rep., § 22.

The most important point for decision, prior to the preparation of the Record of Rights, was the rights and status of the cultivators. about which there was a bitter dispute between the Patháns and Jats. For this purpose Mr. Robertson, Assistant Commissioner. was specially deputed by Government in the cold weather of 1888-89. After a detailed and careful enquiry in cach village Mr. Robertson recorded his findings, which were accepted by Government, and entries were made in the Records of Rights accordingly. The general result of this onquiry was that the cultivators, with a few exceptions, were found to possess most of the rights belonging to owners in British territory, with the important exception of the rights of alicention. This peculiar status has been expressed by the term dakhilkár, which thus in Miler Kotla bears a meaning different to what it oxpresses elsowhere. This term has therefore been applied to the cultivators in the This enquiry settled the points chiefly in Record of Rights. dispute, e.g., rights to trees, waste, wood, etc.

Fiold survoy.
Settlement
Rep., § 23.

Survey work properly commenced in April, 1889, and was completed in October, 1890, all the 119 villages being measured and their khasrás written up in a year and 7 months, including the crop inspections regularly made in March and October. The results of Mr. Robertson's enquiry were authoritatively communicated in September, 1889, and as in all the papers written up between April and September, the cultivators had been entered up as tenants, these had to be entirely revised and written up again. In the meantime the nunsarims were found incompetent and the most worthless of them were replaced by patwáris of the first grade from Ferozepore, who gave great satisfaction,

In October 1890, the crop inspection was made for the first time for all the villages. It was based on the new maps and khasrds, and was therefore more accurate. The Record of Rights was then completed, and the mistakes found in it corrected. In his inspections in the cold weather of 1890-91, the Settlement Officer found the soil entries often very incorrect, and ordered a general revision, which occupied nearly 6 months. Even these Rep., § 24. revised entries were not always correct, and they caused a great deal of trouble in the internal distribution of revenue.

CAHP. III, C.

Land Revenue.

Record of

The Record of Rights, prepared for Maler Kotla, contains the Its contents. following papers :--

Rep., § 25.

- List of contents.
 Genealogical tree of dakhilkars.
 Field survey map.
 Field register.
 Khatauni with alphabetical index.
 Statement of rights in wells.
 List of Revenue assignments.
 Tender of engagement.
 Village administration paper.
 Final rubk ir.

All these papers were carefully prepared, and with the exception of the field book, and consequently the khataunis also, were as correct as could be expected. The field book contained errors of arca, and in some places of entries also, but as these were only detected when the records came to be signed it was too late to get thom corrected; nor could the corrections be made except at crop inspections, there being no reliable previous records. On the whole, considering the difficulties, the Record of Rights was fairly well prepared. The original copy was so cut up on account of revisions of outries that two fair copies had to be made, one for the office and the other for the patwaris. Both were well bound, and in the former every paper was signed by the Settlement Collector and each volume by the Superintendent on behalf of the Nawab.

A detailed jamabandi based on the new records was prepared Detailed for each village in the form prescribed by the Revenue Circulars, jumphands. with certain alterations necessitated by the peculiar circumstances of the State. This was filed separately from the Settlement Record on account of its bulk.

The Settlement Officer calculated the total land revenue demand of the State, including the jugire, to be Rs. 3,69,000 in 1891, though suits. he considered that the jagiidars' incomes had probably been over- Rep. \$537-88. stated, and that in the absence of reliable data for the batái-paying villages no estimate, evon approximately correct, of the actual demand could be made. That mismanagement had diminished the State's resources appeared from the fact that in 100 villages the well-irrigated area had decreased from 68,481 to 54,621 bighas Produce in 1891. Applying the rates of yield and prices sanctioned to the Listemate. results of 3 years crop inspections a total demand of Rs. 3,24,165 was arrived at.

The following revenue rates were proposed:-

Revenue.
Assessment Ren. 5 40

	•						Rates w cesses i British cir (Tihára	u role	locreaso por cent. of column 3 over column 4.
1		2			3		4		5
					Rs.	a. p.	Rs. a.	p.	
I BRIGATED	ς	(a) Niśi	1		2	4 0	10	0	125
I BRIGATED III	 ((b) Khális	***]	1	8 0	11 0	0	117
77	((c) Dákar, R	nusli		0 1	0 3	0 5	0	105
II.—Unirrigated	`"{	(d) Bhur, Pi	lok		0	6 0	0 8	0	100
		Roto ou culti	rotion		0 1	2 5			***

The revenue resulting from these was Rs. 3,48,000, nearly 24,000 or 7 per cent. above that given by the produce estimate,

and involving a decrease of 6 per cent. on the former revenue. The old rate on cultivation in the Nawab's villages was 12 annas 7 pies, being 1.3 per cent. higher than the general rate proposed. The proposed rates were from 100 to 125 per cent. higher than those with cesses in the corresponding British circle; that is, if the Assessment rates of the Ludhiána circle be applied the revenue demand of Kotla would be less than half that now proposed. Four-fifths of the net Assessment assets would have given a total of Rs. 2,86,776 and four-fifths of the cash rents one of Rs. 3,40,279, so that the revenue proposed was 21 and 2 per cent. higher than that given by the net assets and cash rent tests respectively. In proposing his rates the Settlement Officer was guided by the condition of the villages under the old demand and by the batai statistics, where trustworthy. In some villages his rates only gave a revenue amounting to 95 or even 80 per cent. of the batái collections. This reduction was justified by the fall in prices which had occurred between

1879 and 1880 and which is illustrated by the marginal figures.

The villages of the Nawab were about the lowest assessed,

Rep., § 30. Rep., § 41.

Assesment Rep , § 40.

	Stap	ilo.		Frice in 1879-80.	Avorage price for 10 years, 1880—89.	Fall per ceat. sinco 1879—80.
1711			-	40	25	14
Wheat	***		***	22		
Barley		***		29	86	24
Gram	400			27	32	19
Maize				29	32	10
	•••	***	*** j			
Jowar	100		1	30	35	17
Cottoo	***	***	•••	9	10	10

and in thom the leases were given in - 1879-80. These leases were determined offers of contractors and bids of money-lenders for the year, and were therefore

⁽¹⁾ The demand for revenue and cesses in Kotla was fixed ot coordinate of the gross produce in grain and one-fourth of the folder, with the costomary subtirates, or a "fair equivalent in cash."

the cash equivalents of the Nawab's share of the produce calculated on that year's prices, less the contractor's profits. The rates brought out a reduction of only 1.3 per cent. in the Nawab's villages. In the jagics the decrease was greater, as the jagic dars had been exacting an unduly heavy revenue and thereby causing much discontent for some years past.

CHAP. Land Revenue

Assesment Rep. § 48.

The revenue actually announced amounted to Rs. 3.49,600. In January 1892, the Commissioner raised the demand of several villages on appeal by jagi dars or on revision, the total increase thus made being Rs. 10,208. Thus the total demand amounted to Rs. 3,59,808, giving a general rate of a fraction over 12 as. 10 p. per bigha as compared with 12 as. 5 p. proposed in the Assessment Report. If the total previous demand of the State be taken at Rs. 3,69,000, the Settlement brought about a decrease of about 2.5 per cent. only. Below is a comparison statement: -

			Rs.
Revenue demand of present assessment		101	8,59,808
Revenue by produce estimate(1)	***		3,24,165
Revenue by 80 per cent. of net assets	,	141	2,86,776
Revenue by 80 per cent. of cash rents	4*4	144	3,40,279

The cesses shown in the margin were sanctioned in 1889,

Rs. a p. ... 10 6 8 ... 8 9 4 par cent. Local rate Lambardári cosa

This distribution is only for accounts Rep § 621 purposes and for realization of the cesses from assignees of revenue. In the cultivators' khataunis the total de-

mand of land revenue and cesses was entered in lump sums.

The net results were:-

Land revenue ... 3,02,239 ... 57,569 Total ... 3,59,808

The former dates of instalment were two for each harvest, viz:-

... 15th November. 15th December. Kharff Rabi

instalments. Assessment Rep. § 45.

For the future it was decided to adopt one for each, viz., 15th December for the Kharif, and 15th June for the Rabi as in Kalsia and Pataudi.

In Maler Kotla the villagers, in all cases, fixed the proportion, the rates on each kind of soil should bear to one another, and these Rep § 64. proportions were often very fair. Soil rates for each village were then worked out according to these proportions, and the demand for each holding made out on the soil of each kind possessed by the holders. This of course resulted in an increase on holdings which

CHAP. III, C., Land Revenue.

Belllement Rep. § 61.

paid too little before, and 45 appeals were proferred and decided by the Settlement Officer on the spot, but the people did not appear at all satisfied. Each sharer wanted to adopt the method which would benefit him most. In several of these appeals the Settlement Collector had to abandon the distinction of soils, except that between irrigated and unirrigated, as he found the soil entries very inaccurate. The greatest trouble was, however, experienced in assessing the well-irrigated land. Many wells were not fully used during the Settlement period, and the area irrigated from them during the two harvests succeeding the announcement of revenues was greatly in excess of that recorded in the papers. In such cases the average area was determined from crop inspections. The best method, the Settlement Collector found, for distributing the water-rate was to fix lump sums on each well, calculated on the average area irrigated as by crop inspections. The dakhilkars of Malor Kotla were, however, averse to this, though it was enforced in some of the appealed cases, where no other docision was accoptable; and if in the future a revision of the back be found necessary, more stress should be laid on this.

Revenue assignments in Malor Kotla. Settlement Rep. § 67.

There are three kinds of revenue assignments in Maler Kotla:—

- (a) Those belonging to rolatives and collaterals of the chief, who are doscendants of Nawab Jamal Khan.
- (b) Those belonging to other Pathans who are descendants of the followers of the foundor of the State.
- (c) Petty assignments made by the Nawab, or any of the above-mentioned jágírdárs, out of their villages, for the maintonance of institutions, rewards for service, charity, and other similar reasons.
- (d) The collaterals have by the existing custom been co-sharers of the State with the Nawab, and if a Nawab or collateral dies childless his share (in the case of the Nawab, his private share) is divided among all the co-sharors according to their shares. Similarly, if any jágírdár of class (b) dies without heirs his share lapses to the descendants of Jamál Khán. Those jágirdárs had hitherto paid a contribution of 10 per cent. out of their incomes towards the administration of the State, and the cessos they levied from the cultivators were retained by them. Under the new settlement cesses amounting to 19 per cent. of the land revenue are credited to the State treasury throughout the State, and the contribution of 10 per cent. is maintained as before
- (b) Revenue assignments of the second class are hereditary, but in the event of the death of a jagirdar without heirs, the share lapsos to the descendants of Jamal Khan. These jagirdars paid lump sums as service commutation in varying amounts up to Rs. 57-2-8 per cent. on their incomes. In July 1891, they were put on the same feeting as collaterals and now pay 10 per cent. of their revenue as contribution, in addition to cesses.

MALER KOTLA STATE.] Rights to Waste and to Trees and Wood. [PART A.

(c) The assignments of the third class have been made at different times and for various purposes. Some date from the time of the Emperors, others have been granted by the chiefs and idgirdars of Maler Kotla. All these were enquired into, and brief particulars entered in registers, with the opinions of the Superintendents and Settlement Officers. Under the Commissioner's orders, assignments for institutions were maintained during their existence, those for services were maintained as long as the services are rendered or during the lifetime of the assignee; grants for charity or as favour were resumed in full, or released at half rates for limited t-rms only. No grant was recognised as perpetual, and grants made by jugirdans were struck off the register, as the State did not recognise them. The result of these orders was a reduction of such assignments from Rs. 16,023 to Rs. 10,261. The distribution of the existing demand for land revenue is:-

111, C. Land Revenue. Settlement Rep. § 67.

				Rs.
Nawáb	***	***	,,,	1,07,496
Collaterals	***	***	***	1,49,106
Other jágirdá	its	111	***	35,375
Muáfis	•••	•••	•••	10,262
	Total	***		3,02,239

In Maler Kotla dakhilkars have the right to retain the waste waste in their possession, and have full rights of grazing and grass cutting, as well as to cut brushwood and thorns and to lop branches Rep. § 73. over all the waste lands in their village. Such waste has been recorded as common village property.

They may not, however, break up waste without permission.

The question of rights to trees and wood was one of the most disputed ones both in Maler Kotla and Kalsia. The State and trees and jágirdárs claimed a share in all trees whether growing in cultivated settlement or waste lands of the village.

Rop. § 74.

No tree could be cut without permission, and permission could not be obtained without paying the underlings something. Thus when wood was most needed for agricultural implements or re-roofing houses, the agriculturists preferred buying it to all the vexations and extortions connected with cutting it on their own lands. This has now been decided as follows, and entries made in the Record of Rights accordingly.

In Maler Kotla dakhilkirs have the right to cut all trees growing in the village site, round wells, in oultivated fields and in the cultivated area generally, except shisham, pipal and barota trees. Shisham trees may be taken for agricultural implements and carts on permission. All trees of whatever kind specially planted, grown or tended, by darhilkars in groves, gardens or their cultivated lands, are the property of such dakhilkars.

MALER KOTLA STATE.] Rights of Succession of Dakhilkars [Part A.

III, C. Land Revenne The Nawab or jarirdir is entitled to take wood from the village waste on payment of half its market value and is entitled to half the price of all wood sold from the waste by permission.

Scitlement Rep. § 74. The Nawab or jagirdar is also entitled to take dry pipal and barota trees only and shisham trees not specially planted, grown or tended by cultivators.

To make this order clearer and to onconvage tree planting in pieces of village waste the Commissioner in January, 1892, directed that in villages where there is a patch of waste exceeding 300 kachcha bighas, the State or jágírdár will receive possession of one-third of such patch for the cultivation of trees, and shall have no further claim on that patch.

On smaller patches the claim of the State or jágírdár is fixed at 15 kachcha maunds of fuel per kachcha bigha and one beam of timber 12 feet in length for each village in which the aggregate of small patches of waste is not less than 100 kachcha bighas. If less than that area no beam will be due.

Rights of succession, Settlement Rep. § 76, The rights of succession in case of dakhilkars in Maler Kotla as decided by Mr. Robertson are:—

This (dakhilkir's) right is hereditary and any male heir lineally descended in the male line from any dokhilkir, if he be the nearest male heir of the last dakhilkir, can succeed to the status of dakhilkir in respect of the lands of such dakhilkir. In case there he no direct heirs in the male line, any collateral can succeed, provided he be descended from the same grandfather as the last dakhilkir or any previous dakhilkir who was in possession of the land as dakhilkir.

In case of failure of both direct and collateral heirs, the Nawáb or jágírdár oan arrange for the cultivation of such laud, but it must be first offered for cultivation to the other dakhilkárs of the village.

Rights of alicnation. Settlement Rep. § 76. In Máler Kotla dakhilkár cultivators have no power to alienate their lands by sale, mortgage, or gift, without permission.

This is supplemented by Commissioner's order of 7th May 1890, by which transfers to agriculturists may generally be sanctioned unless there are special reasons against; transfers to the professional money-lending class to be disallowed.

Working of Settlement. In spite of the heavy demand, as compared with British Standards, there is no difficulty in collecting the revenue. Remissions have never been found necessary though suspensions have occasionally been granted.

Section D.-Miscellaneous Revenue.

CHAP.

Directly under the Nazim there is a Superintendent of Excise and Opium with a Dárogha under him.

Miscellaneons Revenue.

Country spirit is made in Maler Kotla by the ordinary still. The contract is leased by auction to the highest bidder.

Excise Department. Country

Drage,

The retail contracts are sold by the Nazim who receives appli- spirit. cations for retail sale which he disposes of as he thinks fit.

There are 6 shops for rotail sale in thana Panjgirain and 7 in tháná Sarand:—

Thinu Saraud

- I. Kanganwal,
- 2. Jandyáli,
- Balewál.
 Dahliz Khurd.
 Dhuler Kalán.
 Biojoki Kalán.

- 7. Saraud.

Thána Panjoiráin.

- 1. Paujgicain.
- 2. Mithewil.

- 3, Kothála. 4. Bhudán. 5. Ghanaur Kalán.
- 6. Játi Mazra.

There is one in Maler Kotla town.

European liquor is sold by two license-holders in Maler Kotla town.

Poppy is cultivated to some extent in the State, and opium is imported under the British rules from Ajmor and Malwa. contract for roud of opinm is sold by auction annually, the contractor being authorized to lease the contracts for retail sale.

The following are the shops for retail sale of opium and drugs :-

Thána Saraud.

- 1. Kanganwal.
- 2. Rohira.
- 3. Kup.
- 4. Jandyáli Khurd.
- 5. Phalaund Kalan.
- 6. Maherna Khurd.
- 7. Dhulor Kalán.
- 8. Bhainí Kalán,

Thona Panjgiráin.

- 1. Panjgiráin.
- 2. Mithowal.
- 3. Khurd.
- 4. Chelifina Khurd.
 5. Kothfila.
 6. Bhúdán.
 7. Muhammadpur.
 8. Dugni.
 9. Badechha.

- 10. Chhung.
- 11. Ghanane Kalan.
- 12. Lachchho Baddi.

In Málor Kotla town thoro are two shops.

Sometimes opium and drug licenses are sold together, but they are nover sold jointly with those for the youd of country spirit.

The income to the State from excise and opium averages Rs. 16,000 a year.

The stamp office is in charge of the Bakhshi under whose supervision the values of the stamps are impressed on the printed

Clamps,

Maler Kotla State.] Stamps, Registration and Income-Tax. [Part A.

CHAP III, D. Miscellaform. No distinction is made between judicial and non-judicial stamps. The values of the stamps in use are:—

Miscellaneous Revenue-

Annas 1, 2, 4, 8, and Rs. 1, 2, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60 70, 80, 90, and 100.

Stamps.

The stamp sheets are printed in a private press at Maler Kotla, but the value of the stamp is not printed, but impressed by the state Bakhshi. Stamps are only sold at the State treasury. The British Stamp Act and the Court-fees Act are in force in their entirety in the State.

The average income from stamps per annum is Rs. 13,000.

Registration. T

The Indian Registration Act is enforced without modification. The Názim is Registrar and is posted at Máler Kotla. The Tahaildárs are Sub-Registrars in their own Tahails.

	Amount.		
			Rs.
1900-01	•••		281
1901.02	***		222
1902-03	111	}	808
1903-04	***		262
	Averago		268

The income from registration for the years 1900-01 to 1903-04 are shown in the margin.

The Nazim is in charge of Income-Tax Assessments. All incomes from Rs. 100 upwards are liable to be taxed. The income during the years 1900-01 to 1903-04 is shown below:—

		Incomer be	LOW Rs. 600.	Incomes bet And Re	m-1.1			
	Year.		Number of	Amount paid.	Number of assesses.	Amount paid,	Total amount.	
1900-01			Rs. 410	Rs. 1,714	Rs. 18	Rs. 808	Rs. 2,022	
1901-02	,,,	***	422	1,805	18	808	2,118	
1902-08	***	***	44B	1,792	18	308	2,100	
1903-04	100		456	1,831	18	808	2,139	

No income-tax was paid by the State officials till the year 1904-05. In that year the collections amounted to Rs. 5,300, more than double the former collections. The rate charged on all incomes is $2\frac{1}{3}$ per cent.

Local Cesses,

At Settlement the total demand was first assessed, and then divided as under:

				Rs.	2.	p.	
Land Revenue	***	• • • • •	111	84	0	0	per cent.
Local Rate	**1	•••	•••	10	в	8,	<i>11</i>
Patwári Cess	•••	***	•••	. 8	9	4	31.5
Lambardári Cess	1	***	•••	5	0	0	. 1)

Maler Kotla State.] Local and Municipal Government.

PART A.

The not results were	;-						· CHAP. III, E.
Land Revenue		•••		Rs 3,02,238		p.	Local and
Cesses	•••		•••	57,569			Municipal Government
	Total			3,59,808	0	0	Local Cernes,
The cesses in 1904-0	5 were s	s follo	-: BWC				•
				Re.	ß,		
Local Rate	• •••	•••		31,269	8	10	
Patwári Fund		•••		. 10,901	1	4	
Lambardári Fund	•••	***	•••	15,009	0	0	
•	Tota	l		57,179	10	2	
						_	

Schools, Hospitals, and Roads are maintained from the local rate.

Miscellanous revenue to the amount of Rs. 1,000 is collected Miscellaneous from the State Birs and gardens. The Mint, which is let out on contract, yields an average revenue of Rs. 600 a year. The State Rupee, formerly worth annas 12, is now worth only annas 8 in British currency. The Rupee is the only coin minted. Other miscellanous revenue amounts to Rs 3,000.

The State gets an annual income of Rs. 30,000 from the Bailway Ludhiána-Dhuí-Jakhal Railway, in which it is interested to the extent of eight lakhs. The income is, however, rapidly increasing.

The total income of the State from all sources except actroi is about Rs. 4,40,000. This includes Rs. 1,70,000 enjoyed by Jagirdárs and Muafidárs.

Section E.-Local and Municipal Government.

The State has no District or Local Board. There are, however, three Municipalities constituted in 1905, namely, Maler Kotla, Killa Rahmatgarh, and Jamaipura. The two latter are large villages near Maler Kotla, and are controlled by the same Committee.

Though these places have only been lately constituted Municipalities, octroi has been collected for many years, and no other tax has yet been imposed. The Nazim is President of the Municipal Committee, which consists of 20 members, all nominated by the

The average income from octroi for the years 1900-01 to 1903-04 was Rs. 23,960. This gives an incidence of taxation of one rupee a head of the population. All the police in the State with the sanitation and vaccination staffs are, paid from Municipal

Funds. The octroi staff consists of a Superintendent with a III. G. munsarim and several subordinates. They have charge of the three Army. Municipalities.

Re. 789	2.78			hmont	oi Establis	Octroi :
203	14.2				e	Police
214	3,2	444	ation	Vecci:	tation and	Sanitat
088	4,0	***	***		ng Ronds	Paving
031	1,6	***	•••	•••	ellenons	Miscell

The expenditure for the year 1903 is shown in the margin. The income of that year was Rs. 26,805.

Total ... 25,055

Section F.—Public Works.

The Public Works Department is under the Home Minister, and is in charge of a Superintendent. For the State Roads there is a sub-overseer and a darogha, and for the Buildings, a sub-overseer, draughtsman, and two mistres. The expenditure on roads is paid from the Local Rate, but the buildings are constructed from State Funds.

Section G.—Army.

The Maler Kotla State Forces comprise the Imperial Service Sappers and Miners, Irregular Cavalry and Artillery with the Military Police.

Imperial Cer-

The Imperial Service Suppers were raised in June 1894, and vice Sappers are under the Officer Commanding the State Forces. The Corps is maintained at a strength of 177, including officers and men; and it is proposed to raise a body of mounted Sappers to be attached to it. There is a well-equipped band of 44 men under an experienced European Bandmaster.

Tirah expedition.

During the comparatively short time of its existence the Maler Kotla Imperial Service Sappers have had a notable record of good service in the field, inasmuch as they have been twice on active service. The Tirah Expedition of 1897-98 was the first occasion on which they were engaged. They did much useful work in the snows of the winter of that year in the way of making bridges, roads, and trenches. While at work, they had several engagements with the enemy. The services rendered by the body during the campaign were acknowledged in an appreciative letter by the Government of India to the Ruling Chief; and, in recognition thereof, its Commandding Officer received the honorary title of Bahadur.

China.

The second occasion on which the corps went on active service was the China Expedition of 1900. It remained in China nearly a year. On its return, the Commanding Officer was made a Companion of the Indian Empire, and the Superintendent of the State, the Nawab of Loharu, a Knight of the same order,

Police and -Jails. MALER KOTLA STATE.

It is to be noted that the Maler Kotla Imperial Service Sappers is the only body among the Imperial Service Troops of the Punjab that has been twice on active service. Its efficiency is recognized Police and on all hands. The cantonments lie to the west of Kila Rahmatgarh.

CHAP. III, H. Jials,

The State Cavalry is an irregular body of troops, consisting or 50 men and officers, all told. It is well trained and is mainly used as an escort to His Highness the Nawab, and the Regent.

Cavalry.

The State Artillery comprises 35 men and officers with 9 guns, two of which only are serviceable. The guns are used for firing salutes on ceremonial occasion.

Artillery.

Thore are three companies of Military Police, each company being composed of 76 men and officers. The full strength is 231 Police, men. Only one company is at Healquarters at one time, the others being allowed to stay at thoir homes. Each man must do three months training a year, but can be called to attend at any time. They are mainly used as guards at the residence of the Nawab and have nothing to do with the Civil Police.

Section H.—Police and Jails.

The Superintendent of Police is subordinate to the Home Minister in all matters except drill and discipline, in which he is subordinate to the Officer Commanding the State forces. The force consists of an Inspector, a Court Inspector, 3 Sub-Inspectors, 3 first 3 second, and 11 third grade Scrgeants, a tracker, a female searcher. and 82 constables with 7 mounted constables, giving a total of 113. Men are sent to attend the Training School at Phillaur. The police are paid from Municipal Funds. In addition to the regular police, there are 90 chaukidars in the villages, each paid Rs. 4 a month out of the chaukidara fund There are three Thánás, Máler Kotla, Panjgiráin, and araud. There is a cattle-pound at each Thana.

Police.

The Jail at Maler Kotla contains accommodation for 50 male and 20 female prisoners, but the convicts never approach that number.

It is under the control of the Chiof Judgo and in charge of the Medical Officer of the State as Superintendent. He has under him a Jailor and an Assistant Jailor.

All prisoners, both civil and criminal, including those undergoing life sentences are confined in the Jail. Prisoners under-- going trial are also detained in it.

Darris, chiks, and shoes are manufactured in the Jail. The annual income amounts to Rs. 6,524, while the expenditure is Rs. 8,723.

literate at the last census:—

CHAP. III. I.

Section I.—Education and Literacy.

Education and Literacy.

Literacy.

The percentage of literate persons amongst Hindús, Sikhs, Jains, and Muhammadans at the ... 47 per cent Hindas ... Sikba ••• last census is shewn in the margin. ... 185 Jains It will be observed that the percent-... 18 Muhammedans ... 12 9.0 ngo is by far the highest amongst the Jains and lowest amongst the Muhammadans. The following table shows the number of males and females who were recorded as

	D	etail			•	Number	Per cent.
Mules	 •••			***		2,000	6.8
Females	 ***	•••	•••	***]	82	.2
		1	l'otal	•••		2,982	8.8

Schools.

The only school in the State is the Angle-Vornacular Diamond Jubilee High School at Milor Kotla, which has a staff of 11, including a head-master, second and third masters, a head maulavi and second oriental teacher. Each mosque in the town has a maktab attached to it, and there are also 4 or 5 páthshálas. Those, however, are not inspected or controlled in any way.

Of the 7 schools established by Nawab Ibrahim Ali Khan, those at Sherwani Kot, l'anjgirain and Khurd lasted until 1903, when they were closed.

There are about 200 pupils in the High School English, Arabic, and Persian are taught.

Maktabs.

There are 141 boys and 53 girls attending the maktabs of Máler Kotlu. Both Persian and Arabic are taught with a little Arithmetic in some of them.

Páthshálas. In There is

In the Páthshálas, Hindí, Shástri and Arithmetic are taught. There is one where girls only are educated. It is called the Arya Kanya Páthshálá. At prosent 25 girls attend it. They are taught cooking, sewing, and embroidery besides reading and writing.

Section J.-Medical.

Medical Staff. The Medical Department of the State is under the control of the Home Minister and consists of:—

- A Civil Assistant Surgeon who is State Medical Officer and holds charge of the Civil Hospital at Sadr.
- (2) A Hospital Assistant who is in charge of the Sadr Hospital under the State Medical Officer.

CHAP. III, J.

- (3) A Hospital Assistant who is in charge of the Military Hospital.
- Medical. (4) A Hospital Assistant in charge of the Hospital at l'anjguáin.

The Stuff of the Sadr hospital comprises the State Medical Sadr Hospita, Officor, an Hospital Assistant, a clerk, a compounder and a dresser with other necessary subordinates.

Ont-door patients avoraged during the first quarter of 1904, 148 a day. For in-deer patients the average daily attendance in the same period was 3.2; while 250 surgical operations were performed besides reports on medico-logal casos and post-mortems examination.

Besides the Civil Hospital at Maler Kotla there is a private par. dispensary (Dar-ul-shufa) for the Nawab and his family in charge of a hakim.

Soveral baids, jarrahs, and hakims practice privately in tho town and villages. During an outbreak of pluguo, cholora, or the Baids. like, the State retains temporary paid hakims and boids for the benefit of the public.

There is a Hospital Assistant and a compounder both at the Million and Military and the Panjgirain Hospitals. The total number of Panjgirain patients, out-door and in-door, at the Military Hospital during the Hospitals, first quarter of 1904 was 439. The Panjgiram llospital was only opened in December 1905.

There is a Superintendent in charge of the Vaccination and Vaccination Sanitation work. He is not an Hospital Assistant but is under the and tuon. control of the State Medical Officer. Under him there are two vaccinators with a chaprassi. The number of vaccinations done during 1902-03 was 1,158. The people as a rule submit to vaceination of their children with a little persuasion; but some classes, such as the Banias, etc., still object to it. For sanitation work the Superintendent has under him 2 daroghás, 2 jamadars, 16 bhistis, and 28 sweepers. These are only employed in Maler Kotla town.

The cleanliness of the surroundings of villages and their streets is occasionally inspected by the Police, as well as by the medical. sanitation, and vaccination staffs. The people are directed to removo accumulations of refuse.

The expenditure on vaccination and sanitation is mot from Municipal Funds; while the Medical Department is maintained from the Local Rate. Medical Expenditure averages Rs. 7,000 a year. All the hospitals are free.

CHAPTER IV-PLACES OF INTEREST.

CHAP. IV.

interest.

Máler Kot'a.

Maler Kotla is the only town in the State. It is situated 28 Places of miles south of Ludhiana in north latitude 30°31' and east longitude 75°59'. The population at the ccusus of 1901 was 21,122.

> The town is naturally divided into the two parts of Miler and Kotla, the latter of which is walled These parts have lately been united by the construction of the new Moti Bazár.

History.

Sadr-ud-Din, the founder of the Kotla family, settled at Bhumsi, a village which lay on a tributary of the Sutlej tributary, though now non-existent, is still traceable, its course being marked by the torrent which runs between Maler and Kotla during heavy rains. The population of Bhumsi rapidly increased and a new town was founded by him at Müler in 1466. It quickly became so large as to include the old village of Bhumsi within its boundaries. It remained the headquarters of the State till Bayazíd Khán, the fifth in descent from the Sadr-ud-Dín, founded Kotla in 1656. The name of Kotla is said to be derived from the ko' or wall which was built round tho town.

The houses of the ruling family are situated in the Kotla part of the town. A large Diwan-Khana (audience-hall) was built there by Nawáb Sikandar Ali Khán. The High School is near the Delhi Gate.

Shrine of Sair-nd-Din

In the Maler part of the town is situated the Mausoleum of Sheikh Sadr-ud-Dín Every Thursday, a fair is held at the shrine when offerings are made in the shape of money, jewellery, and grain. On the first Thursday of overy lunar month, the fair is much larger and more important, thousands of people attending. It is strange that these fairs are mostly attended by Hindús, though Sadr-ud-Dín was a Muhammadan Saint.

The Bazar.

A new bazar, connecting Maler and Kotla, was made in 1904-05 in accordance with plans approved by the Regent. It is called the Moti Bazar and is one of the handsomest in the Punjab. All the shops are two-storied, made of red brick, and of a uniform design. The street is wide enough to allow four Courts to pass at

one time and it is lit by lamps attached to iron-poles in the middle of the street. The whole effect is excellent.

A new and large grain-market, the Ahmad Ganj, named after the Regent has also been recently constructed. It adjoins the Moti Bazar. The parade-ground and cantonments lie outside the city. The Railway Station, constructed on plans approved by the State, is about a mile south of Kotla.

Municipal Committee.

Grain-Market.

> Máler Kotla, Killa Rahmatgarh, and Jamálpúra wero constituted Municipalities in December 1905. They have the same Committee, the working of which has been described in Section E of Chapter III.

Killa Rahmatgarh lies about a mile to the south-east of Máler CHAP.IV. Kotla and has a population of 1,418 souls. It was founded by Rahmat Alí Khún early in the 19th century. Most of the Offices and Courts of the State are situated in Rahmatgarh and a Post Kille Rab-Office has also been opened there.

matgerh.

Jamálpúra is a large villago of 2,079 souls near Máler Kotla. Jamálpúra. It was built by Jamal Khan about the end of the 15th century and contains the State Jail. It has lately been constituted a Municipality along with Maler Kotla.

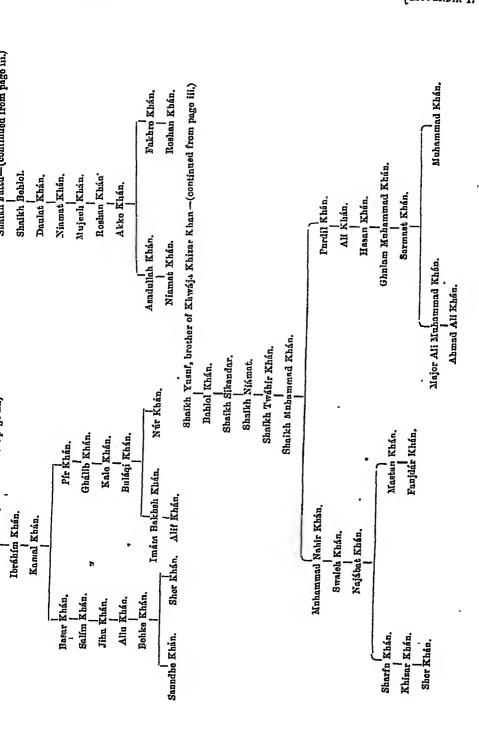
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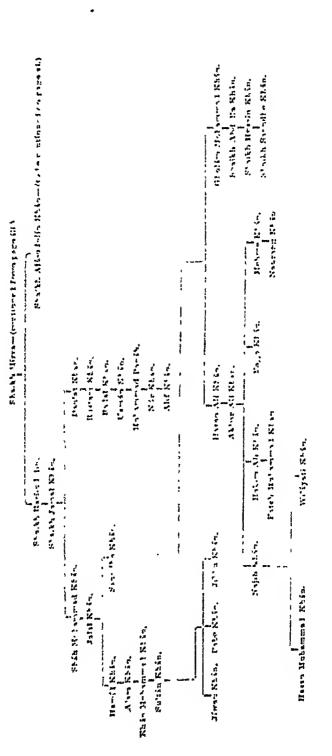
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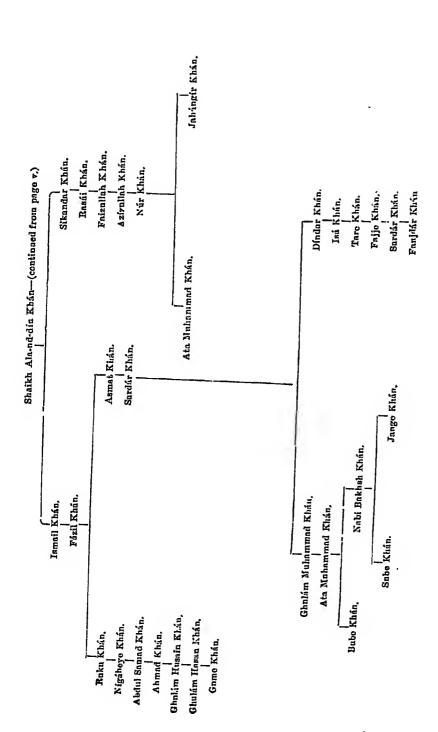
GENEALOGY OF THE MALER KOTLA FAMILY.

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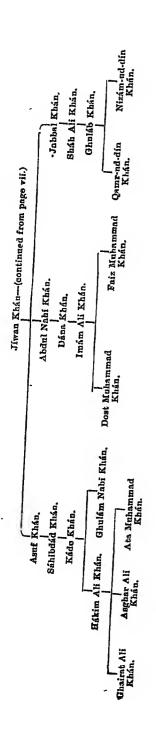
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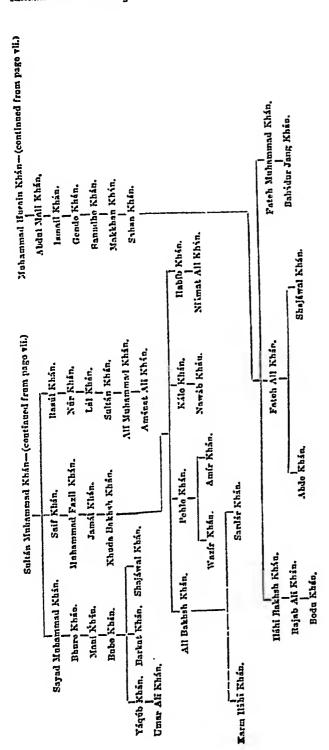




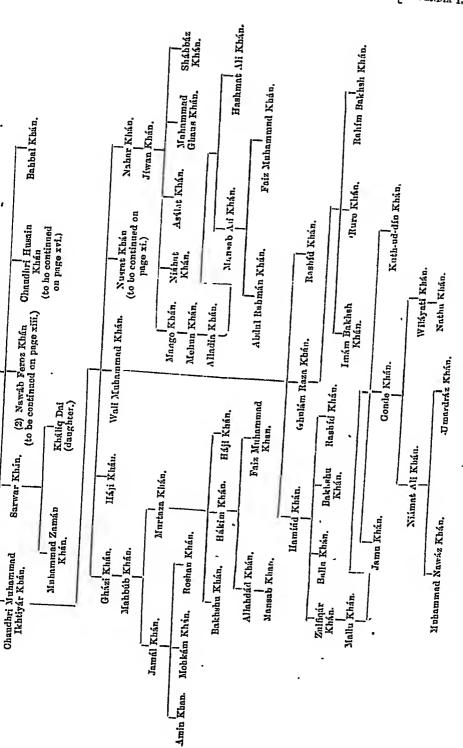


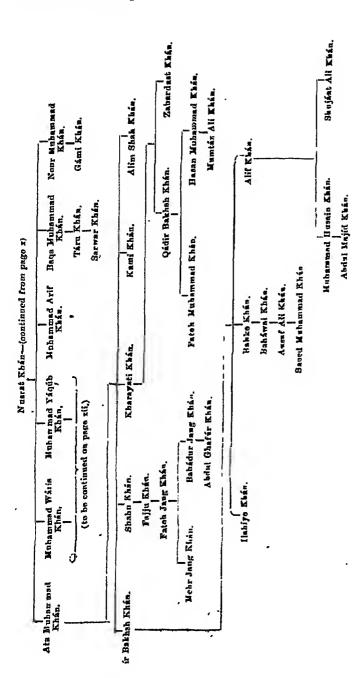
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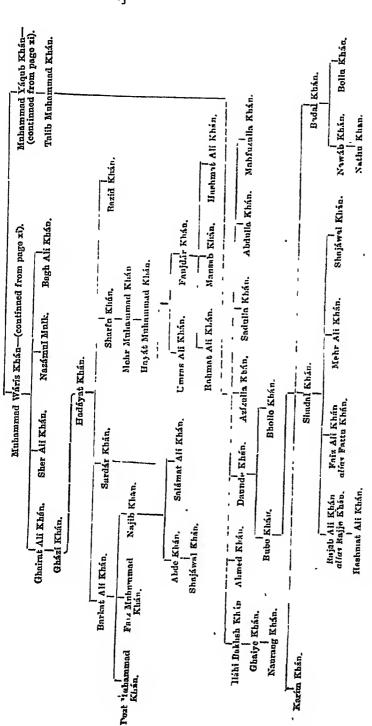


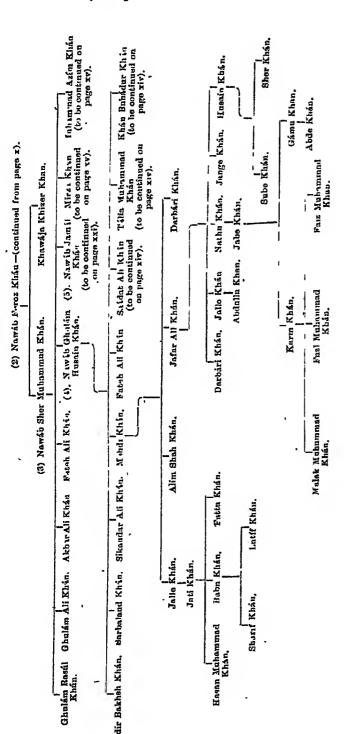


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